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BULLETIN OF THE PAN AMERICAN UNION

VOL. XXXVIII
JANUARY-JUNE
1914



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WASHINGTON, D. C., U. S. A. : : : : :
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VOL. XXXVIII

JANUARY, 1914

NO. 1

INAUGURATION OF BUENOS AIRES SUBWAY

ON the 1st of December, 1913, the great city of Buenos Aires established service over a section of its new subway, thereby being the first South American city to adopt underground transit in order to meet the demands of rapid and constant growth. Truly, it may be said that the famous city on the Plata presented to each of its inhabitants a New Year present; for the management of the road invited all citizens to come and enjoy a free ride and see the wonders wrought by man beneath the city's streets. The population responded, and for a whole week free rides popularized and advertised the new enterprise as no other method could have done.

In every modern city the transportation of people to and from their daily duties has become one of the leading lines of business, and the study of the wonderful facilities that our larger cities offer is an interesting and even fascinating subject of economic and civic betterment.

Specialists have applied the title of intraurban transportation to the facilities that deal with this problem; and on the other hand the railroads that handle the multitudes of people have divided their systems into three general classes—surface, elevated, and underground—and each of these divisions has developed many special facilities along their individual lines. The rapid stride from the horse car and "jingle bells" has been a wonderful business builder, but we can only glance in passing at one of the modern systems, that of the underground development.

The third and most expensive system of construction is that of the underground transit, and this is employed only where the first two systems can not be further developed, or where the human congestion is so great that subways offer the most practical solution.

London is credited with starting in 1853 a system of excavating deep trenches, building side walls and then covering the top with arches of brick upon which the street was relaid. This tunnel, constructed from above instead of through the earth, paved the way for many other underground passages of the English metropolis. By

1866 Chicago found street congestion so great that it was necessary to burrow into the ground under her river; five years later that city had two lines of rapid rail transit under the Chicago River, and to-day the city has 65 miles of underground railways.

In 1886 J. H. Greathead began tunneling under the Thames, which was continued for $3\frac{1}{2}$ miles. New York's first subway marked many advanced steps in underground transit, and this service began to operate in 1904; and with lines that have been completed and those under construction the cost will be something like \$300,000,000, or almost approximating the gigantic work at Panama.

Progressive Buenos Aires, as already mentioned, is the first South American city to construct an underground railway. The growth of this city has been marvelous, and although the system of surface cars, which was started in 1868, has long been rendering excellent service, it was found that additional facilities were urgently needed to care for the congestion of her business streets.

On September 14, 1911, the first earth was turned in the Argentine capital, which act marked the beginning of a great system of underground transit. The event was made memorable by the participation of high officials and leading citizens; and while the proposed vast outlay was generally favored there were some who opposed the movement; however, opposition counted for naught for the work has steadily progressed, and on December 1, 1913, the first section of the completed road was thrown open to the public.

The inauguration of service was even more spectacular than the beginning, and likewise was attended by vast throngs of people from the Vice President of the Republic to the humblest citizen. The people naturally rejoiced at the new and novel facilities they were to enjoy, and the free rides for everybody for several days preceding the official inauguration greatly popularized the innovation; at the same time the immense crowds taxed the efficiency of the service, which, however, responded splendidly to all demands.

The concession for the underground transit of Buenos Aires was granted to the Anglo-Argentine Tramways Co., which operates the surface lines of the city, and which in recent years has been unable to handle the increased traffic. The underground lines authorized by the concession were planned so as to give the entire city, as far as possible, the advantages of the system. The line recently put in operation is 2 miles long, with double track, and connects the Plaza Mayo, and the Plaza Once de Setiembre, or to be plainer for those who are unacquainted with the city, it may be said that the line runs from the Government House, thence under the main thoroughfare, Avenida Mayo, to the new capitol of the Republic, a distance of about 1 mile; and thence to Plaza Once de Setiembre, where the underground trains connect with suburban electric trains and with the great Buenos Aires Western Railway. Travel between the two plazas named formerly required at least 30 minutes by coach or surface

railway, but the new rapid transit cuts the time in half, and this time will be much reduced after the service is operated a short period.

The operation of the first 2 miles of road will be followed by the gradual extension over the remaining three divisions called for by the concession, or a total of about 8 miles; and before many years Buenos Aires will have one of the finest underground railway systems of the world.

Concessions were granted for the following lines:

1. Between Plaza de Mayo and Plaza 11 de Setiembre (completed).
2. An extension from Plaza 11 de Setiembre to Plaza Primera Junta in Caballito.
3. Between the Retiro railway station and Plaza Constitucion, passing through the central section of the city.
4. Between Plaza de Mayo and Plaza de Italia (Palermo).

The total cost was originally given at about \$30,000,000, but numerous slight modifications as well as possible changes of first plans may materially alter the figures given.

As an illustration of the growth of street car traffic we have statistics which show that in 1901 the surface cars carried 125,525,264 passengers; in 1910 this traffic had increased to 323,640,637 persons; so that judging by the past progress it would appear that the company which is expending such an enormous sum has well-grounded reasons for providing more facilities for handling the rapidly increasing population.

Buenos Aires' street car service was started in 1868, when horses drew the cars along Calle Lima from Moreno to Plaza Constitucion and back. This innovation continued service with little patronage for a year or so. About 1869 other lines made their appearance, and from that date onward the extension of new lines and the enjoyment of patronage has rapidly increased. A number of companies originally operated the several lines, but from the early seventies the Anglo-Argentine Co. gradually absorbed other lines and threw the service into one great system.

The system of subways adopted by the municipality are quite similar to those of the London Metropolitan Railway, where the tracks are immediately below the street level; whereas in New York and some other cities the subway level is many feet below the surface. For instance, in passing under the Hudson and East Rivers at New York it was necessary to tunnel far below the bottom of the rivers in order to avoid possible seepage.

In Buenos Aires the system has been constructed mainly by excavating to the required depth along certain streets, and then constructing side walls of masonry and finally covering over the top by means of heavy steel girders, upon which rest the earth and paved streets. In pushing this extensive work many mechanical scoops have been employed which excavated 75 tons of earth per hour; this excavation was followed by the masonry and finally by the tile finishing which adds so much to the interior attractions of the various stations.

About every three squares stations have been provided and these have the unusual feature of being finished in different colors, which fact, it is believed, will render the various stations much more easily recognized than by merely depending upon the painted sign. For instance, the first station on the Plaza Mayo is sky-blue, another one is yellow, a third is green, and so on; the color scheme being carried out in all essential features.

The operating system is known as the multiple-unit control, which requires only one motorman, whose post is on the front platform of the first car. Here he controls the entire train, each car having its own motors and air brakes. Block-signal system is in use, being worked by signalmen at each station, and all signals are visual. The cars in service are of modern pattern with all conveniences: each one weighs about 30 tons and has accommodation for 40 passengers. The both-end entrance and exit pattern is used, and as the gauge of the road is 5 feet 6 inches, an unusual amount of space is provided, so that in case of extremely congested traffic, this may be utilized for standing room. A third rail permits also the use of standard-gauge cars (4 feet 8½ inches) which if necessary may be brought in from the surface lines. The fare on surface lines anywhere in the city is equal to about 5 cents in United States money; a transfer to the underground route costs 2 cents additional or vice versa.

In the laying of the roadbed quebracho-wood ties have been employed almost exclusively, and as this is one of the hardest woods known it is believed they will last many years without renewal.

The commodious dimensions and handsome finishings of the stations have been a special feature of the enterprise, and the entrance from the streets is down flights of easy stairs. The station at Once de Setiembre is the finest of the system and is 120 meters long and 45 meters in width. Within the building are located six different tracks, four belonging to the subway company and the other two to the Buenos Aires Western Railway, which fact greatly facilitates travel between the respective lines.

As a whole the completion of the first section of the subway has been very satisfactory and the contractors are to be congratulated on their having finished within the required time limit. In speaking of the accomplishment one of the officials, Dr. Anchorena, in a speech at the inaugural ceremonies said, among other things:

The effort has been crowned by the most flattering result and it should be a motive for intimate rejoicing, for it has the signification of a potent fact: To us has fallen the good fortune to be the first to enjoy the enormous benefits such as exist in London, Paris, Berlin, Vienna, New York, the model cities par excellence in urban developments. * * *

I can not omit pronouncing at this moment the name of the distinguished engineer, Pedriali, who has been the sole and indefatigable organizer, who did not take an hour of repose before he obtained from the municipality of Buenos Aires this concession of such eminently local character, thus contributing by his example of activity and intelligence to fulfill with splendid result this work of which we are so proud.

SOUTH AMERICAN FRUIT PRODUCTION¹

THE traveler in a foreign land naturally makes many comparisons with his own country. He notes the similarities and differences in methods, products, and conditions in whatever field his training and inclination may direct his interest, and so it is the purpose of this paper to point out some of the more conspicuous features of the fruit industry in South America.

One of the most striking differences, perhaps, is in the character of the fruits native to each of the two continents. South America seems singularly lacking in any native species representing those deciduous fruits so extensively grown in the United States. There are no native apples, pears, peaches, or true plums; in fact, none of the common tree fruits of this important group. Among the small fruits it is true a few species of *Rubus* (the genus of the family Rosaceæ, which includes the parent species of our varieties of raspberries and blackberries), are known, and we are indebted to Chile for the parent species of the strawberry. On the other hand, we have in the United States native crab apples, plums, many species of *Rubus*, and of the strawberry perhaps three or more native species. Other native fruits of South America are the guava, chirimoya, granadilla or *Passiflora*; *Spondias*; *Lucuma*; some species of *Opuntia*, *Feijoa*, *Queule* (*Gomortega nitida*), a tree of the family Lauraceæ; a myrtaceous fruit called murta or murtella (*Ugni molinae*), which is about the size and shape of a blueberry; a small tiliaceous fruit known as maqui (*Aristotelia maqui*), sometimes mixed with the grape and made into wine; one unimportant species of grape in the extreme north, capuli or capoilles, the fruit of *Prunus salicifolia*, which is related to our chokecherry; and perhaps one or two other little-known fruits. For the most part these names are foreign to North American pomology, and the strawberry and feijoa are the only ones occurring outside the Tropics that have been placed under cultivation. Comparatively few have assumed importance commercially even within the Tropics. Nevertheless, in spite of this paucity of important native fruits, South America probably has a range of climate and variety of conditions that will admit of the successful cultivation of every known fruit. Very nearly all of present importance have been introduced into one locality or another. In the tropical or subtropical regions are those adapted to such a climate, namely, the sapodilla, mammee apple,

¹ By W. F. Wight of the United States Department of Agriculture.

mango, breadfruit, banana, tamarinde, pomegranite, avocado, loquat, olive, fig, orange, and lemon, in addition to those native. In temperate regions nearly all of the deciduous fruits grown in the United States have been introduced.

In the Argentine only in the case of the grape has there been any important development. As is well known, that part of the country longest under cultivation is a vast plain, apparently rather poorly adapted to the culture of tree fruits at least, and only in the vicinity of Buenos Aires has it been given attention on the pampas. Probably the most serious difficulty is that the winter season is mild and the temperature not constant enough to keep the fruit buds in a dormant condition. Nevertheless, some of the more enterprising "rancheros" have small mixed plantations, and occasionally there is a peach orchard of considerable extent. The locality famous locally for its peaches is the Tigre, a name given to a group of small islands in the delta of the Parana, 35 or 40 miles above the city of Buenos Aires. Here the influence of the water is usually sufficient to prevent frost injury, but such low, moist lands would not appeal to a North American.

Farther north, in the vicinity of Tucuman, citrus fruits are produced, mainly oranges, and almost entirely of seedling origin. The industry is undeveloped and is said to afford little profit, owing to high transportation rates and primitive methods of shipping. Practically no pomelos are found in the market in any of the countries visited, and the lime is often more abundant than the lemon. Still farther north, in the Province of Salta, are sections favorable to the production of subtropical fruits, such as the chirimoya and avocado, and these are grown in a limited way, but mainly for local consumption. As yet lack of transportation facilities discourages much enterprise in this direction. There is, however, the possibility that with the development of the northeast of the Argentine favorable sections may be served by river transportation. There is in the Argentine no extensive apple industry, and during the months of December and January the market is mainly supplied by our Pacific coast box apples. Nevertheless, some parts of the country along the eastern base of the Andes in the Provinces of Neuquen and Rio Negro are probably well adapted to the production of this fruit. In fact, a few groves of wild apples, remains of some early introduction, made, according to tradition, by the Jesuits, occur in this section and are said to produce fruit of good quality.

The grape appears to be the only fruit to attain commercial importance, and the culture of this fruit has in recent years been developed quite extensively and with profit, particularly in the Province of Mendoza.

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SOUTH AMERICAN FRUIT PRODUCTION.

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A school of *viti-vino* culture is located in the city of Mendoza, and this appeared in the most satisfactory condition of any experimental work observed in the country. Its grounds consist of about 65 acres, on which are planted some 1,200 supposedly distinct varieties, all *viniferas* with the exception of a few hybrid stocks. At this station instruction is given in wine making, and the buildings are fairly well equipped, the wine cellar being in excellent condition. The coming year it is planned to erect new buildings, costing about \$335,000. Several years ago a number of Italian vineyardists were brought to Mendoza, and the prosperity of the industry dates from that time. The vines, thus differing from the usual California practice, are trained on trellises, and recently the overhead trellis has been adopted to a considerable extent for growing fine table grapes. In December, 1912, a small precooling station was completed, and it was planned to bring the grapes direct from the vineyard, pack them in a cool room, and ship in refrigerator cars to Buenos Aires.

Undeveloped land in the vicinity of Mendoza is considered worth from \$170 to \$250 per acre. Planted in vines it is valued at \$850 to \$1,200 per acre. The net profit from vines in good bearing condition is said to be about \$170 per acre. One grower, a native Argentino, stated that table grapes trained on an overhead trellis yielded him a net profit of \$840 to \$1,000 per acre, and that he had received as high as \$4.20 for single selected clusters in Buenos Aires. He would not sell his land for 10,000 pesos per hectare, which is equivalent to about \$1,680 per acre. The area in vines for the whole of the Argentine is stated at 259,000 acres in 1910, and the production of wine as 92,674,000 gallons, valued at more than 25 million dollars. In the same year California produced nearly 45½ million gallons, valued at a little more than thirteen million dollars.

Peaches, nectarines, and apricots are also grown in the Mendoza and San Juan region, but only in a limited way. They are propagated from seed to a considerable extent, but often the fruit is of excellent quality. There was a surprising number of the flat, or "peento," peaches, and for this no explanation was given. The proportion of nectarines was also much greater than in this country.

Leaving Mendoza and passing over the barren heights of the Andes at an altitude of more than 10,000 feet the traveler arrives in Chile. First impressions are pleasing. One seems to have reached another California, but with a climate possibly even more mild. There are, in fact, many similarities, and all of the fruits grown in California are produced in Chile, probably in equal perfection, but with far less care, and the industry has not developed as in North America. There are perhaps a few large well-planted and well-cared-for orchards, but for the most part one sees only small plant-

ings, suggesting somewhat the manner of southern France; but often they were jungles of intertwined branches of seedling trees of a half dozen different fruits. Nevertheless, fruit of excellent appearance and if properly mature when gathered, of excellent quality as well, finds its way to the markets of such cities as Santiago, Valparaiso, and Concepcion. Even at the small town of Llai Llai one sees at the railway station baskets of peaches, apricots, cherries, grapes, and perhaps other fruits in their season, of such perfect appearance as to find a ready sale with the passing traveler.

Except at great altitudes, nowhere north of Puerto Montt does one experience low winter temperatures, and there are only a few degrees of frost at most in any section open to the influence of the sea. In central Chile, between Los Andes and Valparaiso, subtropical fruits are found—such as the avocado, chirimoya, and papaya—but much smaller in size and for the most part of inferior quality to the same fruits in the tropical regions from which they were introduced. During the months from January to April, citrus fruits did not appear to be common, though they are grown in sections sufficiently free from frost even considerably south of Santiago. As in the Argentine, probably the grape is the most important single fruit and is largely utilized in the wine industry. Chilean wines, in fact, enjoy a very good reputation in South America and are exported to the Argentine in considerable quantities. The annual production is in the neighborhood of 42 million gallons, in addition to other alcoholic liquors made from the grape. The region of greatest wine production lies between Santiago and Concepcion, and it is also the chief section for stone fruits. Apples and pears are grown considerably farther south, and Valdivia is locally quite famous for its apples. A most important and most interesting horticultural establishment is near Angol, some distance south of Concepcion. It is one of the principal nurseries in Chile, but in addition some fruits, mainly apples, are grown. The story of this place is perhaps best told in the genial proprietor's own words. He says:

Had I started as a farmer and nurseryman earlier in life I should no doubt have made a mark in my country, but I commenced when over 40 years old, and had to feel my way, and possibly made some mistakes, but I expect not any of importance. * * * To-day I send you a couple of my catalogues, and many of the varieties you will find familiar to you, as I have imported them from California, the Eastern States, and Europe. * * *

The varieties I grow for the fruit are the Newtown pippin, which is called in Chile the "Bunster" apple generally; Puchacay de Verano, which is no doubt the best summer apple in the world and will keep perfectly for a month and a half at least; * * * Baldwin, Blenheim, Orange, Boston russet, Calville Blanc d'Hiver, Huidobro (an original Chilean apple, which resists entirely the attacks of the woolly louse), Reinette d'Angleterre (which you call the Monstrous New York pippin), Bellflower, Beauty of Kent, Missouri pippin, Ontario pepin, Pero Joaquin (a Chilean

apple, a fine keeper, but too sweet for your taste), Limon, or Chocho (another very fine native winter apple, and the most wonderful and early cropper in the world); Hoover, Mignon d'Hiver, Golden Pearmain, Reinette pepin, White Winter Pearmain, Canada pippin, Bismarck, Sturmer pippin, Mignon d'Hollande, Jonathan, Swaar, Smith's cider, Lawver, Limbertwig, Cooper's Market, and a few others.

After my trip around the world three years ago and in the fall and winter, I came back convinced that the fruit produced in Chile is the best by a long way, and that we have not so many pests as you have in the United States. * * * The varieties which here resist the woolly louse are Huidobro, Northern Spy, Duquesa de Oldenburg (Duchess of Oldenburg), Reineta Galloway, Hoover, White Winter Pearmain, Reinete pepin, Presidente Montt, and Jeneral Korner.

The Verjil is a variety originating here and is especially adapted for very cold climates, as it does not come into leaf before December (with you it would be June); the fruit is delightfully sweet and juicy and tender.

The only pests here are the woolly louse and very little scale in the apple trees, but nothing in citrons, olive, or other trees.

Apples from this grower's orchard have sold in Buenos Aires for 25 pesos (or, in American gold, \$10.50) a box of 140 apples, and individual fine specimens have retailed in Valparaiso for about 22 cents each. The land was secured nearly 50 years ago, Angol at that time being on the Chilean frontier, for about 20 cents (American) per acre, with 50 years in which to make the payments. No interest was required. The establishment appears to be a progressive one in every particular.

Leaving Angol and journeying southward one reaches a region more closely resembling portions of our Oregon and Washington. Gradually the forest appears and increases in density. By many the south is considered Chile's richest agricultural territory. As yet it is little developed. Excepting a narrow strip along the single longitudinal railway the region is accessible only by crude two-wheeled wooden oxcarts which wend their way slowly and loudly protesting along winding ways deep with dust or mud, according to the season. Yet these forest-covered hills and slopes are exceedingly fertile and seemingly possess every natural advantage required for productive farms. Indeed, a German colony has transformed the vicinity of Rio Bueno into an attractive, prosperous community. Neither should one fail in passing to remark the natural beauty of the region. The combination of river and lake with forest-covered mountain, and here and there the snowy summits of volcanoes reaching far beyond the timber line, may well hold the traveler spellbound, for in few countries of the world may be seen its equal.

Leaving Chile and going northward to Peru and Bolivia, one reaches countries that lie wholly within the Tropics, yet in consequence of the high altitude of some sections they nevertheless present a range of climate as great as that of any country on the continent, and in some portions a climate perhaps peculiar to that region alone.

Landing at Mollendo and passing by successive steps to one table-land after another the city of Arequipa, 7,680 feet in altitude, may be reached in a half day's ride by rail from the sea. From the city, no matter what direction the view may take, there is practically nothing to be seen except the dry, barren plains and mountains, yet the climate can be described as delightful; while from unseen and unsuspected narrow valleys the Indian or Peruvian Cholo brings to market the product of the country. One never sees a wheeled vehicle outside the city, and fruits of all kinds are packed in crude carriers made usually of strips of leather and lined with grass. In such packages fruit as well as vegetables are transported, sometimes several days' journey on the backs of burros or llamas. It is a land where probably only seedling fruits are known. It is doubtful if there is a single nursery in Peru, and it was said that probably not a half dozen men in the country know the art of grafting or budding. The tropical and subtropical fruits that can bear transportation are of excellent quality and fairly presentable. Grapes also are excellent in quality but very forbidding when they reach market so far as appearance is concerned. As they lie in heaps on benches or on the ground covered with bees they can be described only as a sticky, sugary mess. They are, of course, all *viniferas*. Apples and peaches, as seen from April to June, at least, would probably be considered of little value as compared with those of Chile; in the case of peaches, however, doubtless due to the lack of suitable varieties. The foreigner, unless he is of a particularly investigating turn of mind, confines himself to oranges, bananas, avocados, and chirimoyas, yet the lucuma, which can be grown in Peru up to 6,500 feet altitude, is an excellent fruit; it has a greenish rind and the flesh is about the color and consistency of a baked hubbard squash. Yellow guavas (*Psidium guayava*) are many of them pear-shaped and 3 to 4 inches long. Trees of the strawberry guava (*Psidium cattleyanum*) not infrequently grow to a height of 20 feet or more. The fruit of a spondias, called by the natives "Ciruela agria," is about the size and shape of a date, but too soft to preserve its form as it is handled by the Peruvians. The granadilla (*Passiflora ligularis*) is common and quite agreeable, as well as its near relative the tuna. Very common and rather highly prized by the natives as well as by some foreigners are the several varieties of the tuna. There is also a native cherry which bears its fruit in racemes, and therefore belongs to a different section of the genus from our cultivated cherries. The fruit, nearly the size of an Early Richmond, is gathered from the wild trees in the valley of the Urubamba, north of Cuzeo, and brought to that city, where they were seen in the month of May.

In Bolivia, in the markets of La Paz and Oruro, most of these same fruits may be found, but as these cities are situated in a vast semi-

arid table-land 12 to 13 thousand feet above the sea, all fruits are brought from lower altitudes. The important agricultural section of Bolivia is on the eastern side of the eastern Cordilleras, where the rainfall is much greater. A considerable part of that region has an excellent climate and other natural conditions for the production of good fruit. A railway is being constructed from Oruro to Cochabamba, but until finished all produce must be transported on mule back.

The opportunity in both Bolivia and Peru for an increased production of various fruits so far as suitable land and climatic conditions are concerned must be very great. The production of native fruits is perhaps at the present time far less than it was centuries ago. There were at the time of the Spanish conquest and still remain evidences of a much greater population than the region now supports. It is estimated that three centuries after the conquest the Indian population was reduced to less than one-fourth the number in 1524. The ruins of stupendous stone structures, of extensive irrigation works, and of terraced hill and mountain side, often extending more than a thousand feet above the floor of the valley, all attest the existence of a considerable agricultural population. In many instances these same areas await only the reconstruction of irrigation works and the coming of a population to till the soil. The conditions existing, particularly in the west-coast countries, suggest the possibility at some future time of a fruit industry of such proportions as to afford a considerable exportation. It is therefore of interest to consider briefly some of the factors that may favor or militate against such a development. One of these factors and one certainly of primary importance is the season at which the important fruits mature, and, while varying somewhat in different countries and localities, it may be given about as follows:

Apples: Most of the varieties are mature in March and the months following, with a few ripening in February and possibly one or two in January. The season of the very latest closes in November.

Cherries: May extend from November to February.

Peaches: Mostly December to March, or a little later perhaps in Peru.

Pears: Mostly February or March to May, with a few somewhat later.

Plums: Mainly January to March.

Apricots: December to February.

Grapes: January or February to May or June.

Oranges: Mainly September to November or December in Argentina and Chile, with probably a longer season in Peru.

Lemons: All the year.

. As might be expected these fruits ripen at a time when most of them can not be obtained in northern markets except as they have been grown under glass or kept in storage, and such as may be shipped to the large cities of Europe and North America will reach those markets at a time when they should realize good prices.

Land on the Pacific coast is cheaper in South America than in North America. In some parts of Peru the land is in reality considered of small value, the equipment, such as servants, cattle, and sheep, determining the price of an estancia. There is water for irrigation, not perhaps enough for the total area requiring it, but certainly very much more than at present utilized. More than 30 million acres in Chile alone are said to be susceptible of irrigation. Labor is also cheaper, though less efficient. While it may be questioned whether an export trade will be developed in the Argentine, except possibly in the case of the grape, owing largely to the distance from the coast of the favorable fruit sections and the consequent heavy rail charges, no such obstacle exists on a large part of the Pacific coast. As before stated, apples from our Northwest are now being sent to Buenos Aires via New York, a distance of 3,000 miles or more, by rail or water in the United States and 6,914 miles by sea. The rate from New York on such shipments is 32½ cents per cubic foot in open storage, or approximately 50 cents per box, and about 75 cents per cubic foot in the refrigerator. The later varieties have carried practically intact in the refrigerator and a fair average in the open stowage, although the steamship lines look upon the latter as more or less of a gamble, considering the transit time of 24 days and the conditions en route. Two experimental shipments of grapes have been made from Mendoza to New York, both of which were failures. This, however, was probably due to inexperience at the Mendoza end of the line in packing for long-distance shipments and to improper handling in general between Mendoza and Buenos Aires, rather than to any inherent difficulty in carrying certain varieties at least, in storage for the required length of time. With the opening of the Panama Canal west-coast ports of South America will be very much nearer than this to the Eastern United States. No announcement has yet been made of any direct service by way of the canal from South American to North American ports, but the project has been under consideration by one or two South American companies. A service to English ports, however, is assured, since it has been announced that ships of the Pacific Steam Navigation Co. will pass around the South American Continent, the alternate ships going in opposite directions.

We should not overlook the fact that ports on the west coast of South America are mostly at an advantage over our own western

LINKING THE ENDS OF CHILE :: :: ::

ON November 23, 1913, the last rails were placed which connected Puerto Montt in southern Chile with Iquique in the far north of that Republic. From Puerto Montt (the last few miles of this portion have been opened only during the past year), in latitude $41^{\circ} 29'$ S., all the way to Santiago, in latitude $33^{\circ} 27'$, the older division has been known as the Central Railway of Chile. It has for years carried the commerce of the beautiful central valley of the country and finally brought into touch with the capital many seaports and mountain valleys.

From Santiago to Valparaiso, a distance of 187 kilometers (116 miles), the railway, one of the first in South America, though belonging to the central system, is a part of the Longitudinal, so far as it forms a link between the north and south of the Republic is concerned. This distance from Valparaiso to Puerto Montt is 1,395 kilometers (867 miles) and in itself is a remarkable example of what a government can accomplish in the way of road building.

The Longitudinal Railway, so called with more popular distinction, now stretches northward from Valparaiso to Iquique, a distance of 1,744 kilometers (about 1,090 miles). Its northern section, between Iquique on the north and Pueblo Hundido on the south, 710 kilometers (about 440 miles), has just recently been completed. It is in the southern section, at Yerba Buenas, 108 kilometers (about 67 miles) north of the town of La Serena, that the rails were finally joined and where the celebration of the event took place, as above stated, on November 23, 1913.

From Santiago the Government had sent, over this lower (southern) section of the Longitudinal, a special train, in which were officials who were to take part in the ceremony. In the unavoidable detention of the President of the Republic, the minister of justice and education, Sr. Enrique Rodriguez, was delegated to represent him and to act for the nation in formally accepting the railway from the construction company. Others were the director general of public works, Sr. Guillermo Illanes; the director general of railways, Sr. Alejandro Guzman; and many members of Congress specially invited. The President showed his interest and enthusiasm in a telegram sent to meet them on the way, with this sentiment:

It is a matter of great satisfaction to see completed during my administration the splendid work of the Longitudinal Railway. This surely must result in solid progress

to the whole nation, but particularly to the northern portion of the Republic, through which it runs. I regret that I can not be present in person at the inauguration ceremonies, but the minister of justice and public instruction will well represent me and express in my name my own feelings. The work is the result of the ambition of those who initiated it, and the whole nation rejoices in their success.

RAMON BARROS LUCO.

On the morning of November 23 another special train left La Serena for Yerbas Buenas, carrying this time both the Government officials and those of the railway from whom the line was to be delivered, as well as local authorities of the near-by cities. At the one hundred and seventeenth kilometer the train stopped, but across the gap formed on the unfinished roadbed was waiting another train from Vallenar, on the north. At 3 o'clock in the afternoon the minister, with enthusiastic greetings from the many around him, drove the last spike, made of solid silver, which anchored firmly the remaining rail, the train passed gently across, and communication between Santiago and Iquique was complete. Toasts and speeches followed, and the party returned to La Serena, where the celebration was continued.

The address of the minister of education was in part as follows:

In the name of the Government, and as special representative of the President, I unite the rails which from to-day will give us connection from one end of the country to the other. The interests of all will thus be bound together and become coextensive with the regions through which our railway runs. The Government is profoundly satisfied and takes pride in the completion of this work, which, with a tenacity born of patriotism and wisdom, we now rejoice to have brought to this final result. May its reward be the thanks of us of to-day as well as those of the future generations who see our forces increased and our efforts made easier in utilizing the treasures in the earth which nature has given us. Our Longitudinal Railway with its several branches is to be of particular service to the northern Provinces. Its total cost to the nation has been a sum of 150,000,000 pesos gold (peso = \$0.3649), but, great as it is, it indicates not merely strength that the north of the country has added to the nation as a whole, but also a worthy development for us all. Let us recognize therefore, and confidently, that this is a national undertaking which in the future is bound to contribute most effectively to our credit and to our national riches. Let us say that by this means we assure future generations and also add to the defense of our national territory. The Government of Chile esteems the good execution of this work, and I take pleasure to express its thanks to the contractors and builders. We recognize the skill and ingenuity which they have ¹ voted to it. But at the same time praise is due to the enterprise of the people of Chile, whose engineers have played their part, and whose laborers with their strength and industry have filled in valleys and torn mountains asunder in order to achieve this victory.

The representative of the Howard Syndicate, Mr. Amboynau, replied:

It is well known that it was the ambition of the Government of Chile and of President Balmaceda, in whose brain it originated, as well as of the people themselves, to see the two extremes of the country united by a railway. Now this dream has become reality; difficulties of all kinds have been overcome, and we can see the finished work.

This country, so rich, so active and hospitable, so energetic and generous, needs only to carry out such splendid works as this which to-day is finished to reach that place to which her glorious destiny entitles her. The builders are proud to have helped in the fulfillment of your desires in having been called to aid in the progress of the Republic. Let me tell you, therefore, that we have tried to do our part and to deserve the confidence you have placed in us.

A pleasant episode during the course of the celebration was the transmission, from various officials both of the Government and of the railway, to the widow of the former President of the Republic, Sra. del Campo de Montt. Expressions of congratulation were sent her on the completion of this railway that had been one of the national enterprises for which her husband had so faithfully striven, and that she had lived to see the day when it was opened. A gold medal was given her in memory of the event.

This Longitudinal system is another of the many examples of the railway ambition of Latin America. Each country has plans by which extension of traffic is to be accomplished and fresh areas of national wealth opened to the world. Chile, with the unusual conditions marking the configuration of the Republic, has been unceasingly active in this regard, and a brief résumé of railway conditions there, together with a history of this northern division, should be of interest at this time.

In Chile was built the first railway in South America. It connected the silver mines of Copiapo with the port of Caldera, and was opened for traffic on July 4, 1851. William Wheelwright, the United States financier and contractor, was responsible for it. Four years later, Henry Meiggs began work on the Central Railway southward from Santiago. He also completed the work begun by Wheelwright for the Chilean Government on the line connecting Valparaiso with Santiago, and this was opened in 1863. Surveys toward and over the Andes were made during this period, and construction was actually begun then, but the tunnel piercing the mountains was opened only finally in 1910. Other passes are to-day the subject of serious study, for it is evident that more abundant means of exchange between Chile and Argentina must be secured for the not distant future. Regular communication with Puerto Montt was established at the beginning of 1913.

The Longitudinal system, while theoretically applied to the entire north and south chain of rails in Chile, in practice is restricted to the line between Valparaiso and Iquique, which will ultimately be extended to the northern frontier. This was projected even during the time of President Balmaceda (1890), and was not allowed to be forgotten by his successor, President Jorje Montt. Quite recently, however, in 1906, Government surveys were carried on by two routes, one along the coast for what is called altogether adhesive, the other

COMMERCIAL TRAVELER IN SOUTH AMERICA ::

To the Editor of the BULLETIN OF THE PAN AMERICAN UNION:

DEAR SIR: Three years ago you were kind enough to accept some articles written from Central America for the BULLETIN. In them I attempted to make a few practical suggestions concerning methods of travel, routes to be selected, social conditions, and commercial opportunities in each of the Republics of Central America.

Please let me thank you once more for your courtesy in accepting them and let me express the hope that they have proved of benefit. Certainly I am proud to say that in the preparation of them they benefited me. The BULLETIN is read by the "house" I represent, and so much interest was aroused by learning through your publication of the opportunities in South America that I was recently sent to examine that field to extend there practically the same activities that had previously called me to Central America. My experiences have been varied, but delightful. While I was able to put into practice many of the lessons learned in Central America, I nevertheless found some conditions different. I had to readjust my focus, as it were, or be led into error. May not the same danger hang over others who visit the Republics of South America for the first time? I have yielded to temptation, therefore. Considering that my own experiences are, as a matter of fact, by no means slight and may probably help others to avoid mistakes, I am bold enough to write again to the BULLETIN. I may help to clear the ground for beginners who are eager to enter this field, but who may have been timid about it. My letters written in Central America were from familiar ground; in this case, however, I am myself to some extent a beginner. I can not therefore give much advice directly. I shall rather narrate my experiences from day to day, try to present the problems of the trip as they presented themselves to me, and hope that I may come out successfully.

To begin at the beginning, then, supposing the traveler is within the area of New York or New Orleans, the very first question touches the time of the year in which to go to South America. Commercial travelers in the United States have organized seasons for their tours. The movement of crops always influences some; the seasons of the year influence others. Fluctuations of travel, general connections from one part of the United States to the other, influence us all. I therefore spent some little time in making my preliminary plans,

trying to find out when I should best leave the "States" for the Southern Continent. From the judgment of many whom I consulted, from constant travelers, business men, and tourists, I came to the conclusion that it made no difference at all. If a man is after business he might leave New York or New Orleans as well in July as in January. To be sure there is some advantage, as I have heard, in reaching Argentina in January about the height of the grain export, or Brazil in November about as the wave of money is returning from Europe to pay for the coffee. But these are not vital. Neither is it essential that you strike the big cities when society there is at its height, although with a little cleverness this can be managed. Business is business, so I have found, and business men will talk business from one year's end to the other. If there be any preference at all, and the decision must rest largely upon the climate in the United States, let me say that a good time to leave is about the 1st of September.

The next question is that of the route to take. Three-fourths of the travelers whom I have met start out, probably without thinking much about it, and go rolling down to Rio. To attack the east coast first and then come up the west coast seems the more popular. I am not going to argue one way or the other, for I should get into hot water if I tried to convince anyone that that was not necessarily correct. I just want to say that I myself went down the west coast first, and I do not regret it. I think I should go down the west coast again, going up the east coast toward home, and perhaps my reasons for doing so will be made a little clearer as I get on with my story.

Another question is always asked by the person crossing "the line" (the equator) for the first time: "Must I be prepared for the Tropics, and what shall I wear in traveling in those hot countries?"

The question of clothing is very easily answered. I myself wear just about the clothing I would have for our medium summer days in the north. Then I always carry some very light flannels (Yaeger), and fine woolen socks. Soft shirts are preferable, and I am pleased to note on this trip that the soft French collars are fashionable. That's all there is to it. Dress to be comfortable, and let theory alone. Now, I am a well-seasoned tropical traveler, and I know what to do and what to wear in Central America. Moreover, as all of Central America lies within the Tropics and as most of the principal places to be visited in a business way are quite tropical, my earlier experiences made everything look alike to me between the Tropics of Cancer and Capricorn. To be sure, San Jose in Costa Rica, Tegucigalpa in Honduras, Quezaltenango in Guatemala, are high up in the air, and consequently quite within the Temperate Zone, climatically, but the seaports are tropical, and I judged most of South America to have the same characteristics. There is where I

made a mistake. I did not ask advice, as I might have done, and trusted to my own experiences, which I found misleading.

Panama is of course tropical; Guayaquil and the valley of its river in Ecuador are tropical, but that is all. The great stretch of the west coast from the northern limit of Peru to Antofagasta in Chile (where the Tropic of Capricorn crosses) is dry, sterile, and sun-baked, so that there is little real comparison between the richly productive regions of the Central American coast or interior and the barren Pacific slopes of the Western Andes. Hot it is in Callao, Mollendo, and Iquique, but heaven knows it is still hotter at times in Boston, New York, New Orleans, or Chicago. It is not so much the thermometric register of heat as it is the amount of moisture in the air and the annual rainfall which characterize the Tropics, in addition to the luxuriant vegetation. Heat alone does not constitute a tropical climate; neither does moisture, nor abundant vegetation. The traveler must encounter all three in conjunction, and, with slight variations from wet to dry seasons, continuous; then he is in the Tropics. But as I said before, only in Guayaquil on the west coast does the traveler meet these conditions. And from here southward the Antarctic or Humboldt's Stream noticeably cools both the air and water. The rest of the trip is within the Temperate Zone, so far as climate is concerned. And it is to laugh when one talks of Tropics in La Paz! I have been here two weeks now, and have almost frozen to death. It is a fact, confessed on paper (and may you never betray me), that twice I have actually gone to bed in the middle of the day to keep warm. I have kept a systematic record of the thermometer in my room, and the highest temperature reached during those two days was 54° F. Occasionally it has gone as high as 58° F., and once—before sunrise in the morning—it went as low as 50° F. In the middle of the day, when the sun was brightest, the register was 106° F. in the sun outside my window. Yet the climate of La Paz is delightful when it is realized that far more attention must be paid to altitude than to latitude. But I'll say more of La Paz when I tell how I got here.

This thing of climate is a hobby of mine, anyhow. By reading as much as I could during many years' travel and even residence in the Tropics, and from personal observation in many different parts of Central America and Mexico, I have come to the firm conviction that the word "Tropics" has been made to cover a multitude of sins. Many are the abuses committed in a tropical country, and the ills or the disasters following upon them are laid to the climate. The sober truth is that the same abuses committed in any part of the world will just as surely lead to the same evil consequences. So far as I can judge, there are only two undeniably tropical diseases; these are malaria and yellow fever. (Physicians would add beriberi and

a few others, but, so I understand, they develop only where life is most primitive and where exposure to insanitary conditions is continuous, as, for instance, during explorations and prolonged construction work on railways.) Even dysentery is not necessarily tropical, nor does it always follow prolonged life in the Tropics, although there is greater danger of intestinal trouble in a hot than in a moderate climate. Most disturbances, let me repeat, come from abuse of health.

Both malaria and yellow fever depend, as we now know, upon the mosquito. Malaria is acquired almost anywhere, yellow fever only within relatively narrow distance of the equator. Both are very prevalent in the Tropics. The science of hygiene--preventive medicine--can subdue and actually obliterate both these diseases, so that, wherever the commercial traveler or tourist may wish to go, danger from them is no longer to be feared.

It is otherwise in the case of one who must live in the Tropics for a period of months or years. Bad habits, as I said, are accountable for the great majority of diseases, and the young man (they are mostly young when they first come to the Tropics) who will live as straight in Panama as he would in Pennsylvania need have little fear of any mysterious tropical disease. Every one of them is a myth. That sounds rather strong, I know, especially coming from a self-confessed and uneducated commercial traveler, but I have observed extensively and asked many questions of many doctors and have yet to encounter a logical denial of my assertion. Careful attention to the rules of health will keep a man as fit in the Tropics as are his friends who never came farther south than Washington, D. C.

I confess, however, that there is one effect of the Tropics which seems to be unavoidable, although it is not essential nor a real disease. Prolonged residence in a climate where the seasonal variations are but slight, marked only from wet to dry, gets on a man's nerves. The Tropics are beautiful, but there is something in the mental and perhaps physical constitution of the Anglo-Saxon which demands a climatic change from summer to winter; and after at most two years' residence under a hotter sun, with the luxuriant greens everlasting around him, he gets physically homesick. That's the time he had better take a rest, a vacation which will carry him north and give him a complete change of atmosphere and surroundings. Large corporations like the Isthmian Canal Commission, and even commercial companies, who look upon their employees as human beings, recognize this habit characteristic, and insist on a northern holiday before the homesickness gets too firm a grip. When the morale is once weakened the physique is bound to suffer.

Now, I suppose you are angry with me for introducing these health paragraphs in an article that started out to be devoted to hints for

the commercial traveler. But, my dear Mr. Editor, please remember that this is a letter and that the commercial traveler or tourist needs just such hints to health before he begins his trip. I feel sure that the question most asked me by my friends and others who know of my experiences, or by those who purpose to go to South America for the first time, is "But aren't you afraid of the Tropics?" No, I answer, and then I give this little talk on health. However, since I have come so far into South America, I wish to emphasize my opinions to all who may read, and then to add, as a sort of Celtic epilogue, that South America, so far as the average traveler is concerned, is practically all outside of the Tropics.

The next question asked me by those who have confidence in my judgment is about money matters. I have forgotten whether or not in my former letters from Central America I said anything about this important topic. Anyhow, Central America is not South America, and therefore it may be worth while to tell what I myself decided to do before I left "the States," and to confirm or upset it by my personal experiences.

In the first place, I carry (and always did) a letter of credit. This will be sold by every first-class bank in any city. In Central America such a letter is best made out to be payable in the local equivalent of United States gold, i. e., so many dollars gold equal so many pesos of the country where the draft is made. While I am told that a similar letter of credit payable in dollars can be purchased for South America, yet it is much better if drafts on it are made payable in the equivalent of the pound sterling. So far as I have come my conviction has been verified. In both Ecuador and Peru the standard of value equals the pound; here in Bolivia this sterling British coin is legal tender, and, so I am given to understand, is of almost unvarying value in Chile. Details of moneys I shall give under each country, but there is no probability that I shall change my mind, and I intend to stick to my letter of credit in pounds.

A suggestion right here will, if remembered, often save trouble. A letter of credit is not necessarily restricted to the bank or agent to whom it is presentable according to the list accompanying it. In fact, drafts on London are frequently in demand, and the holder of a letter of credit can, therefore, sell his draft to any house of good standing wanting such an exchange, and by this open transaction may save himself many a penny.

My further supply of money is in the form of banker's or express checks. These are convenient, take up little room, and are usually convertible into cash at the moment when it is needed. This is not always so, however. Some merchants will not accept these checks; some accept them only as a matter of politeness, protesting that they

have no real current value, while others will only discount them at relatively high rates instead of granting their full face value. This insecurity will be soon overcome, there can be no doubt, because, in South America as in Europe, as such checks become better known their value and convenience will become better recognized, and I would therefore advise their use, as they are mighty handy at times. An awkward feature about them, however, is that they are made out in multiples of \$10 gold and in equivalents of that unit in currency of European countries, the only one of use in South America being the value of £2 10d. The result is that payment for the £2 is offered and the 10 pence ignored. The South American hotel keeper or merchant will not always figure out the value of the 10 pence. My own opinion is that the express companies and the bankers' associations ought to issue these traveler's checks in \$10 notes only, although perhaps a \$5 unit might prove more useful. But it should be devised especially for Latin America and have no equivalent printed on its face. As far south as Ecuador—that is, all over Mexico, Central America, the West Indies, in Panama, Colombia, and even Venezuela—the gold \$5 is a standard. Every banker and merchant recognizes it, is usually glad to get it, and finds the daily quotations of its exchange value at his elbow. This is getting to be, but is not yet, the case in other parts of South America. Nevertheless, a simple \$5 or \$10 check with no strings to it would simply purchase its equivalent in local money and help most directly to popularize our own standard. You may not want to print the last part of this paragraph, but you can make me responsible for the opinion and I will stand by it.

A third supply of funds I always carry in gold sovereigns or in United States eagles. This is cash. The eagles I try to reserve for places in direct touch with the United States, as, for instance, steamers flying the Stars and Stripes (alas how few), or for the day of landing on home soil; the sovereigns I keep secreted about me for any unexpected emergency where cash, and cash only, will meet requirements. That British sovereign is a lifesaver. I have never yet been where it was not recognized and coveted. At times and places where letters of credit or checks are no more than paper, a bit of gold is an open sesame to what lies beyond. With gold in my pocket I know that I need never wait till the holiday is over before continuing on my way; I know that at midnight on arrival or when I wish to leave before the sun rises in the morning, all will be ready for me. And as there is mighty little danger of petty thievery in Latin America, so long as one does not make a foolish display of money, it is quite within the bounds of safety to have a reasonable amount of cash at one's immediate reach.

Am I taking up too much of your valuable space by these preliminaries? They seem unimportant to you, perhaps, but I know how perplexed many are who for the first time plan a trip this way, and while every subscriber to the BULLETIN may not be interested in these details, I venture to hope that to some these hints may be helpful. At least they may add confidence to those who know this advice comes from one who speaks from personal experience. If they do not wish to follow it, or if they have better authority for acting otherwise, no harm is done, and I have relieved my mind. I am ready now to begin. Let us suppose that the traveler has reached Panama—everybody knows all about Panama nowadays—and is about to start down the coast to the mainland of South America.

There are, so I found, several steamer lines south from the port of Panama. Their schedules are available in almost any office, but the days of departure are not regular. In some weeks three steamers may leave, in others only one. Some are old, some new, but all are comfortable. Certainly the three in which I have so far traveled have been comfortable, and my companions who have been in others have had no fault to find with them; but then I am seasoned. Yet this very experience entitles me to judge fairly well, and if there were no worse steamers in the world than those along the west coast of South America, travel would lose much of its terrors.

Not all steamers from Panama, however, touch at Ecuador. Express steamers run between the Isthmus and the ports of Peru, with Callao as the objective point, so that to reach Guayaquil it is necessary to take an intermediate boat. This local steamer makes the 842 miles in four days, and is found in the schedule of the Pacific Steam Navigation Co., or in that of the Chilean line (the Compañía Sud América de Vapores), which run in combination with each other. The Peruvian line (Compañía Peruana de Vapores) is an independent organization supported by the Peruvian Government and has excellent new oil-burning steamers; these may, when another itinerary is established, touch at Ecuador ports also, but when I came south they ran straight to Paita in north Peru without stop.

The approach to Guayaquil is interesting, and is truly tropical, reminding me of Corinto in Nicaragua, hidden, as it is, up the river and shut off from the open ocean by headlands that give at the same time protection from all storms as well as roomy anchorage for ships. I excepted Guayaquil when I said that South America was not to be classed as tropical, and that is true, but in my opinion the traveler who makes South America for the first time, especially if he has never been to Central America, would be wise in omitting Ecuador then, leaving this Republic for a second and therefore more comprehensive trip. As I compare it with my scheme of Latin America, it

belongs commercially rather to Central than to South America. I found my own experiences gave me already a certain familiarity with the country, but that I had much that was different to learn when I got farther south. This is merely a hint; others may reject or accept it, according to its applicability to any particular case.

Here, as in all other countries, the traveler's first consideration is to get some local cash on his letter of credit. Ecuador has a quite stable currency. The sucre is the unit, 10 of which make a condor, equal to a pound sterling. On the basis of our (United States) money, although a sucre of 100 centavos equals only \$0.487 gold, I received only two sucares for every dollar, but this exchange does not fluctuate within noticeable limits. The only caution to be observed is that, as paper money issued by the banks has chiefly a local value, it is best not to carry Guayaquil paper to Quito, or vice versa, but to supply oneself in advance, through any exchange broker, with the paper of the city next on the itinerary.

Let me confess that I have not done Ecuador thoroughly. My purpose in coming to South America has not been solely to sell goods for my house, but rather as a preliminary tour of investigation, taking business where I could, but not exerting myself to the extent that time would be lost in trying to close a contract. In this Republic I therefore stayed only a short while, reckoned by standards in Latin America, and I came to this conclusion: Ecuador is in a transition stage, waiting for the developments of the near future. The Panama Canal is about to be opened. The port and city of Guayaquil are to be made over to meet the demands of a growing commerce. Yellow fever, which is only too prevalent now, is to be wiped out by proper engineering; plague will be obliterated; and shipping facilities improved to meet modern requirements. The railway to Quito is in steady operation, but others are in construction, so that greater areas of the country will be opened. One will reach the capital from a second port on the Pacific coast, another will extend south to Cuenca, and a third is busy crossing the mountains from Ambato to the Rio Curaray. All these projects indicate activity and in the future will be a good field for business. Such cities as Guayaquil, Quito, Cuenca, Ybarra, and Ambato, deserve study, as they are business centers. The merchants in them are of solid standing and represent a large purchasing population. Only Guayaquil, Ambato, and Quito are at present accessible by rail, however, the others being reached by stagecoach or mule. I sacrificed the chance to visit them, although I do not advise others to act likewise, and came back from Quito to Guayaquil, taking steamer for Callao.

But, Mr. Editor, I have already occupied space enough. I had hoped to tell of my adventures in Peru also in this letter, but the preliminary paragraphs strung out beyond my intention and per-

those who may have the good fortune to read the full report of the meeting—and these transactions are to appear in a forthcoming separate volume in connection with the *Journal of Race Development*—will still more thoroughly realize the important place occupied by Latin America in the world movements of the day. Several of the metropolitan newspapers sent special representatives to report the conference, and both the *Outlook* and the *Independent* had members of their staffs present to prepare a résumé of the work.

Great praise must be given to the faculty of Clark University, and especially to President G. Stanley Hall, who presided at the general meetings, and to Dr. George H. Blakeslee, professor of history at the university, through whose energy the conference became a success. In addition to the formal meetings, the people of the university and of the city of Worcester offered to the visitors many social entertainments. The example thus set by Clark University to focus attention in such a pleasant way upon the activities of the world will be continued and thus offer to the scholars and students of the United States a larger opportunity for understanding our international relations.

Clark University is relatively young. It was founded in 1887 under a fund devised for that purpose by Jonas Gilman Clark, and in 1889 it was organized at Worcester, Massachusetts, its principal object being the encouragement of scientific research. Since that date the university has contributed extensively to knowledge in the branches of biology, ethnology, and social economics, and is attracting students to its classes to take advantage of the courses open to inquiries in this direction.

The delegates who attended the conference included well-known authorities on Latin America whose names are familiar to all students of Pan American affairs. Among the speakers were: President Hall, of Clark University; Sr. Don Federico A. Pezet, minister of Peru to the United States; George H. Blakeslee, Clark University; Leopold Grahame, English journalist; David Montt, Chilean journalist; George W. Nasmyth, director International Bureau of Students; Edgar Ewing Brandon, vice president Miami University; J. Masferrer, of Porto Rico; Capt. José Moneta, Argentine navy; J. P. Santamarina, Argentine trade expert; Earl Harding, journalist; S. O. Martin, Harvard University; Hiram Bingham, Yale University; Bailey Willis, consulting geologist to Argentine minister of public works; Charles W. Furlong, lecturer and writer; Ellsworth Huntington, Yale University; Isaiah Bowman, Yale University; John Hay, Inland South American Missionary Union; N. O. Winter, writer; S. W. Reynolds, formerly president Mexican Central Railway Co.; John Howland, president, Colegio Internacional, Guadalajara, Mexico; L. C. Wells, Clark College; Philip M. Brown, Princeton University; Jacob H. Hollander, Johns Hopkins University; Hon. George F. Tucker, author; Albert B. Hart, Harvard University; Rear Admiral F. E. Chadwick, United States Navy; James M. Callahan, West Virginia University; W. D. Boyce, journalist; Hon. John Hays Hammond, international mining expert; Hon. Charles H. Sherrill, formerly United States minister to Argentina; Director General Barrett of the Pan American Union; and Assistant Director Yáñez, Pan American Union.

DINNER IN HONOR OF SECRETARY OF STATE BRYAN :: :: ::

ON Saturday, January 17, 1914, the Committee on Foreign Affairs of the House of Representatives of the United States tendered a dinner in honor of the Secretary of State, Hon. William Jennings Bryan, and Mrs. Bryan, in the Hall of the Americas at the Pan American Union Building. The ambassadors and ministers of the foreign nations represented in Washington, officials of the Department of State, the Pan American Union, and other prominent men, with their ladies, about 100 in all, were seated around a huge oval table which completely filled the brilliantly illuminated hall. The center of the table was artistically decorated with an abundance of tropical plants and flowers. In the foyer leading off the hall a section of the Marine Band dispensed music throughout the evening.

Such an atmosphere was indeed appropriate for this occasion, which had for its object the bringing together of diplomatic representatives of the nations of the world in friendly and social intercourse with the representatives of this country who are directly interested in promoting good understanding and closer relationship.

Though no set addresses were arranged, Hon. Henry D. Flood, chairman of the Foreign Affairs Committee, who officiated as toastmaster at the dinner, paid a handsome compliment to Mrs. Bryan and lauded the Secretary for his efforts and achievements in the cause of universal peace. In the course of his remarks Congressman Flood said:

During the 10 months he has occupied that exalted position he has achieved the greatest success yet attained in the direction of universal peace. He has succeeded in gaining the assent, in principle, of no less than 31 nations, representing four-fifths of the population of the world, in the negotiations of treaties by which it will be agreed that whenever differences arise between nations they shall be submitted to arbitration before war is declared. If these treaties be concluded the disarmament of the world will begin, and the greatness of nations will be measured not by their brute strength but by their intellectual and humane achievements.

The Secretary replied in an appropriate address, saying, in part:

The words which he has spoken in regard to peace are words that find an echo in all our hearts. Measuring the office, not by the high title that it bears or by the distinction that it brings but rather by the opportunity for service that it offers, I count myself fortunate to have been given a place at the head of the State Department, and still more fortunate to be Secretary of State under a President who is an advocate of universal peace. And, if I may still more highly estimate my good luck, I am fortunate

in occupying this position at this time. Ten years ago the world was not ripe for the peace movement that now spreads among the nations. It was not until after the nations had come together several times in international meetings, held under various auspices, that they were ready for such a movement as that which this administration has undertaken.

I am in this movement with all my heart, and I am sure that we are happy in having as the representatives of foreign nations at this time a group of diplomats who so eagerly and earnestly support the proposition which the President authorized me to present last April.

Less than a year has passed and yet almost all of the countries represented here have indorsed this peace plan. These countries represent more than three-fourths of all the people who live on this globe. Already six treaties have been signed, and during the last week three other nations have agreed upon the details, and in other cases the details are under discussion. I feel that we have reached a point where we can feel sure that within a comparatively short time practically all the nations of the earth will be linked to this nation by treaties which will make it impossible for war to be declared until time has been given for investigation of the subject of dispute. And time is all that is necessary. When people are angry they talk about what they can do, and they often overestimate their strength; but when they are calm they talk about what they ought to do and decide questions on moral rather than on physical grounds.

The effort to bring universal peace is simply an effort to induce people to be natural. It is natural for us to agree with each other; it is natural for us to smile upon each other. Man could not live long if he were angry all the time—the heartbeat would be so fast that life would soon end. Is it not glorious to live at a time like this when the ideals of the world are rising? When, instead of trying to find who we can pull each other down we are trying to devise ways by which we can help each other to rise? And is there not more satisfaction in this than in attempting to profit by another's fall?

* * * * *

Sometimes we read of the horrors of war—how, inflamed by anger, people have done things that we call monstrous! But what is there about war that is not monstrous? How can you make war at its worst worse than war is at its best? At its best it is the destruction of human life; at its best it is taking the husband from the wife, the father from the child, the son from the mother. At its best it is making blood to flow and tears to fall.

Oh, if we could but transplant the spirit of the banquet board where the war spirit has ruled! If we could but bring those who differ from us around a table like this and in the presence of flowers and under the influence of sweet music, talk over our differences, would those whom God made in His image forget the Creator and the spirit of brotherhood?

His Excellency Youssouf Zia Pacha, ambassador of Turkey, responded in behalf of the diplomatic representatives.

During the dinner toasts were offered to the President of the United States, the rulers of the foreign nations represented, and to Secretary and Mrs. Bryan.

Those present were:

The ambassador of Turkey; the ambassador of Italy; the ambassador of Brazil and Mme. da Gama; the ambassador of Russia and Mme. Bakhméteff; the Japanese ambassador; the ambassador of Austria-Hungary and Mme. Dumba; Lady Spring-Rice; the minister of Costa Rica and Mme Calvo; the minister of Portugal; the minister

of Bolivia and Mme. Calderon; the minister of Venezuela; the minister of Switzerland; the minister of Norway and Mme. Bryn; the minister of Argentina and Mrs. Naón; the minister of Uruguay and Mme. de Pena; the minister of Guatemala; the minister of the Dominican Republic and Mme. Peynado; the minister of Peru and Mme. Pezet; the minister of Colombia; the minister of Honduras; the minister of Denmark; the minister of Paraguay; the minister of Panama and Mme. Morales; the minister of Nicaragua and Mme. Chamorro; the minister of Ecuador and Mme. Córdova; the minister of Haiti; the minister of Salvador; the Siamese minister; the chargé d'affaires of Persia and Mme. Ali Kuli Khan; the chargé d'affaires of Mexico; the chargé d'affaires of Greece; the Chinese chargé d'affaires and Mrs. Chang; the chargé d'affaires of Cuba and Mme. de la Vega-Calderon; the Director General of the Pan American Union; the Assistant Director of the Pan American Union and Mrs. Yáñez; Hon. Henry D. Flood; Hon. Henry Cooper and Mrs. Cooper; Hon. George W. Fairchild and Mrs. Fairchild; Hon. Cyrus Cline and Mrs. Cline; Hon. Joseph M. Levy; Hon. William B. B. Ainey and Mrs. Ainey; Hon. James M. Curley and Mrs. Curley; Hon. Robert E. Difenderfer; Hon. William B. Francis and Mrs. Francis; Hon. Byron P. Harrison; Hon. J. Charles Linthicum; Hon. Charles B. Smith and Mrs. Smith; Hon. Edward W. Townsend and Mrs. Townsend; Hon. John J. Rogers and Mrs. Rogers; Hon. Henry W. Temple; Hon. Horace W. Vaughan and Mrs. Vaughan; Hon. John Randall Walker; the Solicitor for the Department of State and Mrs. Folk; the Assistant Secretary of State and Mrs. Osborne; the Second Assistant Secretary of State; the Director of the Consular Service; the Chief Clerk of the Department of State and Mrs. Davis; the Chief Clerk of the Pan American Union and Mrs. Adams; Mrs. Carl von Mayhoff; Mrs. John Tolbert; Mrs. A. A. Allen; Mrs. Charles E. Hagner; Miss Mabel Boardman; Mrs. Arthur Lee; Mrs. Oscar Portner; Mr. Manton M. Wyvill and Mrs. Wyvill; Mr. Frank N. Bauskett and Mrs. Bauskett; Mr. Kelley and Mrs. Kelley; Mr. Cooke; Mr. McCathran; and Mr. Hanks.

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person of Dr. Carlos Larrabure y Correa, who stands at the head of this mission of commerce. This gentleman, for several years prior to his present appointment, was director of the division of fomento of the Peruvian Government, and since assuming his new post he has displayed his accustomed energy in promoting his country's cause in foreign lands.

Let us enter the spacious quarters of "Peru en Europa" and see how interesting and important is the new service. Since the beginning, in April, 1911, the work has grown enormously, and the offices are in correspondence with commercial houses and individuals all over Europe, as well as engaged in receiving visitors daily and telling them personally of the land of Peru.

As already stated, the bureau is splendidly located on one of the principal streets of Paris. Its rooms are very commodious, and the museum, which it really is, conveys a vivid impression of what Peru has to offer the world. There are to be seen and examined countless products of Peru. There are 984 different ores, 425 samples of agricultural products, 125 manufactured articles, and 525 samples of other products, all of which are arranged in cases and in other convenient ways for easy inspection.

In the department of pictures there is an excellent collection of Peruvian photographs of the various sections of the country, which give to those who have not been fortunate enough to visit Peru a fairly good idea of general appearances as well as glimpses of some of the commercial and industrial accomplishments. There are also on file in the reading rooms more than 1,000 different papers, magazines, and bulletins, while the library contains volumes of works on Peru. The reading rooms are open daily to the public, where there are also on file the French newspapers and magazines and other literature.

The bureau also publishes and distributes gratis many booklets, pamphlets, cable messages, etc., containing facts and news about Peru. Many of these subjects are taken up by the press not only of France but in various other European countries, thus spreading a wide knowledge of Peru and its possibilities of commercial and industrial expansion.

In speaking of the work and its usefulness, Dr. Larrabure said:

There is not the least doubt as to the great usefulness of this bureau. Before it was established it was impossible for European nations to secure reliable and prompt information concerning Peru; business men had no authentic source of information, while the legations and consulates could not properly attend to such service simply because between the time they wrote to Lima asking for the required data and the date of arrival of the same the interested parties, being tired of waiting so long, would give the matter up or obtain their information from commercial houses or from other people who, regarding the inquirer as a future rival, would naturally try to dissuade him from doing anything in Peru, drawing a very poor picture of the country or describing it in the most disparaging manner.

At the present time it can be truthfully said that no important business transaction is carried out in Peru without first consulting this bureau.

PAN AMERICAN NOTES

DINNER IN HONOR OF SECRETARY OF STATE BRYAN.

In another column of the **BULLETIN** there is published an account of the dinner given in honor of the Secretary of State and Mrs. Bryan by the Committee on Foreign Affairs of the House of Representatives of the United States, on Saturday, January 17, 1914, in the Hall of the Americas of the Pan American Union Building. Hon. Henry D. Flood, chairman of this committee, who presided as toastmaster, introduced the Secretary of State in a brief address in which he paid fitting tribute to Mr. Bryan's efforts to establish by international treaties the basis for universal peace. Secretary Bryan replied in an appropriate address, extracts from which are also quoted.

NORTH AMERICAN BANKS IN SOUTH AMERICA.

The passage by Congress of the new currency bill, known as the Federal Reserve Act, holds out encouragement for a still further increase in the development of trade between the United States and the countries of South America. For many years it has been contended that one of the obstacles in the development of the foreign trade of this country has been the lack of adequate banking facilities, and especially has this been true of the South American countries where European banks and their branches have been called upon to negotiate and transact commercial exchanges for the North American business concern. By the terms of this new act, however, as contained in section 25, which deals with the establishment of foreign banks, there is every reason to believe that before long there will be established in the leading commercial centers of South America branches of North American banks. In fact, from reliable information at hand, actual progress in this direction is already being made, and active steps are now being taken by more than one group of bankers to thoroughly investigate the field. If the reports received are favorable, branches will very shortly be operating in such centers as Rio de Janeiro, Brazil; Buenos Aires, Argentine Republic; Valparaiso, Chile; Lima, Peru; and probably at other points. The Pan American Union has been working unremittingly for many years to secure this act of the United States Congress, which will permit such banking extensions in South America and to persuade North American bankers to enter that territory. The South American countries and business interests are favorably disposed toward this movement because it will help them as well as the United States in their commercial relations.

THE UNITED STATES MINISTER TO PARAGUAY.

Hon. Daniel Francis Mooney, whose appointment as envoy extraordinary and minister plenipotentiary of the United States to Paraguay has recently been confirmed, has the distinction of being the first minister resident to Paraguay since 1870, when the missions at Uruguay and Paraguay were assigned to the same diplomatic representative, and have been continued so until the reestablishment of a separate legation at Asuncion by Congress, in December, 1913. Mr. Mooney was born at St. Marys, Ohio, January 16, 1865. He attended the public schools of that city, and in 1883 received an appointment from Gen. Ben LeFevre as a cadet to the United States Military Academy at West Point, but owing to a slight visual defect was prevented from a career in the Army. He then taught school for a while, later pursuing a course of legal studies at the Ohio State University, from which he received the degree of bachelor of laws in 1894. In 1896 he was elected solicitor of his native city and filled the office for two terms of two years each. In 1908 Mr. Mooney was honored with election to the State senate of Ohio and served therein for a full term of two years. In 1912 he was again returned to the senate and elected chairman of the important committee on finance of that body.

ANNIVERSARY OF THE INTERNATIONAL BUREAU OF CENTRAL AMERICA.

An interesting celebration took place at Guatemala City, Guatemala, on December 20, 1913, the anniversary date of the establishment of the International Bureau of Central America. At the happy instance of the delegates to this international bureau a special session was called for that day to which were also invited Dr. Luis Toledo Herrarte, secretary of foreign relations of Guatemala; Sr. Lic. Manuel Echeverría y Vidaurre, minister of Guatemala to Salvador; Sr. Lic. Adrián Recinos, assistant secretary of foreign relations of Guatemala; and the chief of the protocol, Sr. Lic. Federico Sáenz de Tejada. Sr. Lic. José Pinto, the acting chairman, delivered an enthusiastic address expressive of the patriotism and the ideals common to the countries of Central America, and yielded the presiding chair to the eminent secretary of foreign relations, Dr. Toledo Herrarte. The latter accepted the honor in a fitting speech marked by expressions of sympathy with everything pertaining to the prosperity and happiness of Central America. A proposal was submitted at this session to place in the international bureau next year five bronze busts of historic characters, each country naming its own illustrious hero.

EDUCATIONAL RELATIONS WITH SOUTH AMERICA.

In the development of educational relations between the United States and South America, involving an interchange of professors as well as of students, several gratifying plans have been announced

within the past few months. On behalf of the Argentine Government it is stated that the Argentine Congress is now considering a recommendation providing for sending to the United States annually a number of high-grade students from the four national universities of that country. Sr. Dr. Rómulo S. Naón, the Argentine minister, is taking a deep interest in effecting this interchange. The Chilean minister at Washington, Sr. Don Eduardo Suárez Mujica, representing the national university of his country, is conducting negotiations with one of the great universities in the United States providing for an annual exchange of professors and students, which it is expected will begin with the next academic year. Sr. Dr. Carlos María de Pena, minister from Uruguay, is preparing to take up a proposal for a similar exchange with the national university of his country. This activity, it is hoped, will be merely the forerunner of similar efforts providing for an interchange of professors and students between all the American universities. As frequently pointed out in these columns, there is perhaps no greater influence for the promotion of better understanding between countries than the intimate acquaintance and association of its representative men as is made possible by such an interchange of students and teachers. In this connection it is interesting to note that progress is being made with the organization of an educational section in the office of the Pan American Union which will perform a most practical work in exchanging information among universities, professors, and students of the American nations.

NEW YEAR GREETING OF ANDREW CARNEGIE

In his efforts to develop a world-wide sentiment for international peace and welfare, Mr. Andrew Carnegie has this year circulated above his signature a New Year greeting card containing an impressive monograph on the barbarity of human warfare, from which we quote the following striking paragraphs:

The foulest blot remaining upon so-called civilized man, beyond question, is the killing of each other. That he has ceased to eat his fellows after killing them matters nothing to the slain and little to the survivors. It is the killing of each other that stamps man still the savage. That this practice is not soon to pass away from civilized man is unthinkable, since history proves that from age to age, by a law of his being, he has been slowly yet surely developing from the beast; hence we are justified in believing that there is no end to his upward march to perfection.

* * * * *

We send this New Year greeting, January 1, 1914, strong in the faith that international peace is soon to prevail, thru several of the great powers agreeing to settle their disputes by arbitration under international law, the pen thus proving mightier than the sword.

In view of the special interest which Mr. Carnegie has always manifested in the countries of Latin America as evidenced by his generous

gifts toward the erection of the Pan American Union Building, the Central American Court of Justice at Cartago, Costa Rica, and to other such agencies of peace, a correspondent of the West Coast Leader, an English newspaper published in Lima, Peru, recently interviewed Mr. Carnegie at his home in New York City. It is regretted that the limitations of space will not permit us to reproduce the word picture that the writer paints of the charming home life which he found on his visit to the Carnegie mansion. We quote, however, the following reply of Mr. Carnegie to a question regarding his views on Latin America:

"Ever since the days of the first Pan American Congress in 1889," said Mr. Carnegie, "when Mr. Blaine asked for my cooperation, I have felt the friendliest and most sympathetic interest in Latin America. My experience in those days was illuminating, and I was agreeably surprised at the type of men who came as delegates to that congress. From that time I began to pay more attention to the southern peoples, and I have been able to do something by assisting toward the erection of that wonderful building of the Pan American Union. During that meeting I made some lasting friendships.

"Say to the people of your New World that I would do anything toward helping the cause of peace with them, and that I fervently hope that a solution may be found very shortly in order that, with the opening of the canal, the ships of the world may find on the great west coast busy nations working shoulder to shoulder for their mutual benefit and mankind."

UNITED STATES UNIVERSITIES AND LATIN AMERICA.

In order to stimulate interest in the study of the various countries of Latin America, special prizes have from time to time been offered by colleges and universities in the United States for student essays and contributions. It is always with a great deal of satisfaction that the BULLETIN has commented on this particular method of directing attention to the fascinating field of study offered by these countries. At this time we congratulate the unknown individual whose generosity and desire for closer Pan American relations have inspired him to offer to Princeton University an annual prize of \$100 to be awarded to that undergraduate who presents, in an open competition, the best essay on Argentine history. As indicative of the interest already existing in the great United States universities, attention is called to the January, 1914, issue of the American Historical Review, in which is published a list of the doctoral dissertations in history now in progress for the current year. Of the 12 doctoral theses which are concerned with America outside the United States, 8 deal with phases of Latin American historical and political development; but still more significant is the fact that these 8 subjects have been presented in 7 different universities located in various sections of the United States.

THE SIXTH CENTRAL AMERICAN CONFERENCE.

A cable dispatch from Tegucigalpa, the capital of Honduras, dated January 1, 1914, to the Pan American Union, conveyed the news that the Sixth Central American Conference opened its sessions on that day and in that capital in compliance with the treaties of Washington. In addition to the distinguished delegates from the five Republics of Central America, the opening meeting was attended by Sr. Dr. Mariano Vásquez, the minister of foreign relations of Honduras, and Sr. Lic. Francisco Nolasco, the assistant secretary of foreign relations. The regular delegates included Sr. Lic. Carlos Lara, from Costa Rica; Sr. Dr. Víctor Sánchez Oceana, from Guatemala; Sr. Dr. Pedro José Bustillo, president, from Honduras; Sr. Don Emilio Alvarez, secretary, from Nicaragua; and Sr. Dr. Manuel I. Morales, from El Salvador. The executive officials of the Pan American Union extend their greetings to the Central American Conference and join with them in sincere wishes for the highest achievements of peace and prosperity for the countries of Central America.

CONSUL GENERAL OF NICARAGUA IN NEW YORK.

The Pan American Union extends congratulations to Sr. Don Ernesto Solorzano D., who has recently been appointed consul general of the Republic of Nicaragua in New York City. The headquarters of the consulate general are at 66 Beaver Street. In presenting these greetings the BULLETIN takes advantage of the opportunity to wish Sr. Solorzano success in his new position, and to express the hope that there may be the fullest cooperation between this organization and his office in the promotion of peace, commerce, and friendship, not alone between Nicaragua and the United States, but between all the Republics of the Western Hemisphere.

THE JURISPRUDENCE OF LATIN AMERICA.

In the magazine section of this issue of the BULLETIN we review at some length an article by the Hon. Hannis Taylor, formerly United States Minister to Spain, and a publicist of note, entitled "The Jurisprudence of Latin America," which appeared in the Virginia Law Review for October, 1913. The article deals with the results of the fusion within the Latin American countries since the close of the French Revolution, of the two immortal products of Roman and English law, and the subject is treated in a manner indicative of the scholarly mind and broad judicial training of its author.

HARVARD UNIVERSITY AND SOUTH AMERICA.

In the Harvard Alumni Bulletin for December 10, 1913, appears an interesting editorial comment on the visit to South America of several members of its faculty accompanying the party of the Boston Chamber of Commerce during the months from April to July, 1913. These particular members traveled as envoys of Harvard University accredited to the leading educational institutions of South America. Referring to the reception accorded them, the writer states:

The representatives of Harvard were received with great courtesy and hospitality by the ministers of public instruction and the authorities of the universities, colleges, and high schools (*liceos*) of Panama, Peru, Bolivia, Chile, the Argentine, Uruguay, and Brazil. Everywhere they encountered a strong desire for the establishing of close relations between South American institutions and Harvard.

In the same article it is also stated that a graduate of Harvard has endowed a professorship of Latin American history and economics in Harvard University.

REPORT OF RECEIVER GENERAL VICK.

Congratulations are due Hon. Walker W. Vick for the sixth annual report of the Dominican customs receivership under the American-Dominican convention of 1907, which has just been issued from the office of the receiver general and to which reference was made in the last issue of the Bulletin. The report contains an interesting and instructive statement of the fiscal affairs of the Republic, emphasized by convincing observations and recommendations, which reveal a careful study of the conditions of that country by the receiver general.

THE COLOMBIAN COMMERCIAL CLUB.

There has recently been organized in New York City under the name of the Colombian Commercial Club an association the objects of which are to bring into closer touch Colombian citizens in the United States with the American investing public, and to direct attention to the great opportunities for profitable commercial relations with the Republic of Colombia. It is the plan of this organization to maintain appropriate headquarters where strangers from Colombia arriving in this country may be received. A library, reading room, and an information bureau are also to be features of the club. In this way it is hoped to keep the two countries in closer touch with each other. The officers are: Honorary presidents, His Excellency, Señor Don Julio Betancourt, Colombian Minister at Washington; Sr. Don Francisco Escobar, Consul General of Colombia in New York City; Sr. Don Miguel Camacho Roldan, Dean of the Colombian Colony of New York; president, Dr. Alejandro Andrade; vice-president, Earl Harding; treasurer, Heliodoro Londoño; secretary, F. O. Altinger. The Pan American Union extends its heartiest congratulations to the officers and wishes for the club a fruitful and prosperous existence.

NINETEENTH INTERNATIONAL CONGRESS OF AMERICANISTS.

Preliminary notice has just been issued of the first session of the Nineteenth International Congress of Americanists which will be held at Washington, D. C., from Monday, October 5, to Saturday, October 10, 1914. Pursuant to arrangements made at the last congress, which met in London during the summer of 1912, the gathering of 1914 will meet in America in two sessions, the first at Washington, D. C., and the second at La Paz, Bolivia. The Washington session will be held under the auspices of the Smithsonian Institution in cooperation with the several universities of this city, the Anthropological Society of Washington, and the Washington Society of the Archaeological Institute of America. The meetings will take place in the new building of the United States National Museum. Further particulars may be obtained from members of the organizing committee, which has as its officers William H. Holmes, chairman; Aleš Hrdlicka, secretary; and Clarence F. Norment, treasurer, of Washington, D. C.

EX-PRESIDENT THEODORE ROOSEVELT IN CHILE.

The office of the Pan American Union has received so many requests for a correct copy of the letter which the Chilean minister, Sr. Don Eduardo Suárez Mujica, wrote to the Washington Times December 27, 1913, in regard to the visit of ex-President Roosevelt to Santiago, Chile, that it is reproduced below:

To the EDITOR THE WASHINGTON TIMES, City.

MY DEAR SIR: Your editorial of the 22d instant, under the heading of "The Chilean Incident"—framed in sober and deferential terms, quite different from the articles published in other newspapers—leads me to address you these few lines in order to rectify some facts and interpretations.

In the first place, I wish to thank you for the complimentary references to my country contained in your article, and I am especially appreciative of the interest which it shows for a wiser cultivation of the relations between the United States and Chile.

Secondly, permit me to draw your attention to the fact that, according to the information I possess, Mr. Marcial Martínez was not designated by the Chilean Government to be its spokesman. He being the ranking member of the law faculty of the University of Santiago—which institution extended to Mr. Roosevelt the invitation to go to Chile—Mr. Martínez was chosen to represent the university on the occasion of the reception to Mr. Roosevelt. Therefore, there was no such "Government spokesman" as it has been stated, and consequently it could not have happened that "the Chilean administration deliberately took advantage of the occasion to get itself on record regarding the Monroe doctrine."

When the Chilean Government wishes to express an opinion it does not resort to indirect means, but expresses it openly through its minister for foreign affairs or through its representatives abroad.

Allow me now to say that it is not entirely exact that there exists in Chile an ill will toward the United States. Americans living there, and likewise those who have visited the country with some spirit of observation, can bear witness to the fact that the distinctive qualities of the people of the United States are fully appreciated by the Chile-

ans and that they never spare an opportunity to welcome, frankly and cordially, the citizens of this country.

The visits of Mr. Bacon and Mr. Roosevelt himself are quite recent, and certainly those distinguished citizens can attest to this fact. And, if state secrets could find their way into the press, it would likewise be shown that the policy of both Governments, in their mutual relations, is characterized by the most cordial entente and a sincere desire of acting in perfect accord.

The matter is that the people of Chile are strongly conscious of the strength of their rights, and are fully aware that, by reason of their racial conditions, of their organization, of the well-proven stability of their institutions, of their progress in every branch, and of their civic education and public spirit, they are not the inferiors of any other people, and that they have the right to maintain their place in the first rank of the nations of this continent.

It is thus that whatever attempt, even though it be apparent, to overstep or disregard their rights finds them erect and determined to hold their aggressor in the right path.

Happily the frictions recalled in your editorial have been solved, with no exception, without sacrificing the exigencies of Chile's decorum, and have left in my country's heart no other trace than the fleeting impression that a vanished annoyance leaves in a strong mind.

Now, then, whether the Monroe doctrine is regarded with more or less favor in Chile and other countries of South America is a question undoubtedly due to the fact that the meaning and reach of that utterance by President Monroe has been so multiplied that nowadays it is really difficult for the public mind to discern what is understood by such doctrine, and as a result of this confusion of ideas public opinion, both in the United States and in the other countries of America, charge to the account of that doctrine all manifestations of the international policy of the United States in so far as they seem or are presumed to be contrary to the interests of the other American republics. In that way, whenever an incident touches the national susceptibility of any of those latter countries it produces, *ipso facto*, a rebounding of antipathy toward the Monroe doctrine.

Consequently, the advisable thing to do would be for the press to do its share in molding public opinion anew with regard to the meaning and reach of the Monroe doctrine, in such a way that public opinion may know precisely what political action may be developed when the application of that doctrine is discussed.

Moreover, I am sure that you understand, Mr. Editor, that the countries which have reached a high degree of organization, of international standing, and of autonomous sovereignty, have no reason to regard with suspicion any doctrine, because they will judge and decide for themselves and as their highest interests may dictate, as to the application of such doctrine to each instance.

We must not lose sight of the fact that the utterance popularly known as the Monroe doctrine is not a principle of international law or of universal legislation, but merely a declaration of this Government which has deserved the highest respect in the United States, and that, at the same time and in the terms in which it was formulated, must have been gratifying to the other countries of America.

Finally, the story made up about the so-called incident between Mr. Roosevelt and Mr. Martinez seems to me to be an artificial one, because I have before me the copy of the Lima (Peru) West Coast Leader of November 17—from which I positively know the information was taken—and it speaks of what has been termed “an incident” only in a passing way and casually, and such mention is made in the course of a long account showing what a warm and enthusiastic reception was accorded by the people of Chile to Mr. Roosevelt. And yet notice has been taken here only of the supposed incident and not a word has been said of that splendid reception given by all the leading elements of the Chilean activities.

With renewed thanks, I am,

Very faithfully, yours,

EDUARDO SUÁREZ MUJICA,
E. E. and M. P. of Chile.

A TRIBUTE TO AMERICAN HOSPITALITY.

An echo has just come from across the Atlantic vibrant with expressions of appreciation for the hospitality extended to the foreign student delegates who attended the Eighth International Congress of Students which met in the United States during August-September, 1913. In a communication received by the Director General and signed by the Hungarian members of the central committee, Dr. Etienne de Zsembery and Dr. Zoltan de Hindy, the delegation from that country communicates its pleasure at the eighth congress just passed in these words:

The days spent on the territory of the United States of North America will always remain unforgetable to every participant, and they will always keep an excellent souvenir of the great friendly honor, by which, dear sir, you so kindly distinguished them.

The Hungarian delegate remembers still with enchantment the kind reception in which he took part everywhere he went, and therefore we consider it a duty of ours to express our best thanks for your incomparable hospitality and kindness.

INTERNATIONAL RUBBER AND ALLIED INDUSTRIES CONGRESS.

The Fourth International Rubber and Allied Industries Congress will meet at the exhibition at the Royal Agricultural Hall, London, on Tuesday, June 30, 1914. Sir Henry A. Blake, G. C. M. G., president, will welcome the delegates and deliver an inaugural address. The executive committee in its preliminary circular invites the presentation of papers by delegates and suggests for discussion the following general group of subjects on rubber: Descriptive, historical and general; cultivation and botanical; commercial, statistical, and financial; rubber preparation; rubber testing; labor organization; rubber nomenclature. All correspondence relating to the congress should be addressed to the Hon. Secretaries Fourth International Rubber and Allied Industries Congress, Exhibition Offices, 75 Chancery Lane, London, W. C.

SUCCESS OF A YOUNG LATIN AMERICAN PLAYWRIGHT.

Success has again crowned the dramatic efforts of Sr. Don Alfonso Washington Pezet, the talented son of the Peruvian minister in Washington. The premiere performance of his latest production, *Marrying Money*, was recently given at the Empire Theater, Syracuse, New York, and it immediately scored a triumph. Like his earlier play, *The Remaking of the Raleighs*, which was so well received in Washington and wherever it was produced, this later effort reveals in a creditable degree the intellect, wit, and dramatic technique of the young playwright, which augur a worthy histrionic career for him. The success

of Mr. Pezet is all the more deserving of praise when it is remembered that his plays are agreeably clean, breezy, thoroughly refreshing, and devoid of the overexploited questions of morals, eugenics, sex, hygiene, etc., which envelop the modern drama of to-day. *Marrying Money* is a clever light satire upon society, and conveys its little moral effectively. The theme is based on the New York idea that money is the measure of a man. Two young people marry, each urged on by friends and relatives who suppose that the other is rich. The fact is that both are impostors, but in their imposture they happen to fall in love. After they have been undeeceived they stick together, resolved to make their own future. The initial performance was witnessed by a large audience. Judging from the applause and laughter evoked by the lines and situations, success seems to be assured for this production. In commenting on the play a dramatic critic on the Syracuse Herald writes:

It is the most amusing light comedy we have had since the *Years of Discretion* opening, and while its fun is younger fun the intellects behind the lines are no less keen, and the play is just as effective. Also it is just as admirably cast and mounted. I predict a great success for *Marrying Money*.

Another interesting sidelight in connection with the author is revealed in the following "confession" of the critic:

Marrying Money was altogether the biggest stage surprise I have ever had. No unusually loud trumpets were blown to herald its advent. To me the knowledge that a son of the Peruvian minister was a coauthor aroused only regret that the young man's father's prominence should be used to prop up a probably futile play. I have now to apologize humbly to Mr. Pezet for thus patronizing him in my thoughts. After seeing him watch the opening night of *Marrying Money*, I am confident that his share in the making of the truly brilliant comedy was a large one.

After the performance, the Minister and Mme. Pezet, together with a party of representative people of Syracuse, were the guests of Hon. Ivan H. Wise, the general secretary of the Syracuse Chamber of Commerce, at a midnight supper. Mr. Wise was so enthused over the play and its author that, in a communication to the Director General, he expressed the opinion that the play "will have a phenomenal run over the footlights throughout the United States." The play, he continues, is full of situations, the lines well written, and command constant attention. "The artistic and intellectual Syracuse is very discriminatory, and we were pleased by the continuing appreciation this play received last evening. It is a well-known fact in the dramatic world that if a play can first succeed in Syracuse, its future success on the road is assured," concludes Mr. Wise. We congratulate Mr. Alfonso Washington Pezet on this additional achievement in his dramatic career, and take pleasure in the fact that a young Latin American playwright has won praise and honors in the histrionic circles of the United States.

PAN AMERICA IN THE MAGAZINES :: ::

To the Maquiritares' Land, in the December number of the American Museum Journal, is the title given to the report of Leo E. Miller, the leader of the museum's lower Orinoco expedition. Mr. Miller, accompanied by Mr. F. X. Iglseder as assistant, sailed from New York to Trinidad in the latter part of November, 1912, and thence across the Gulf of Paria and up the Orinoco to Ciudad Bolivar, about 240 miles from the mouth of that turbulent stream. After a week spent in provisioning the expedition, a sloop was chartered to carry the party and its rather cumbersome equipment to the foot of the cataract of Atures, the first effectual barrier to navigation. At the town of Atures they were hospitably received by Gen. Roberto Pulido, governor of the Department of the Upper Orinoco, and the next day proceeded to Salvajito, another league overland. From here to Maipures the journey was to be made by means of a small dugout canoe, making three trips to transport all the equipment. On the second trip the canoe and one of the natives were lost in crossing the rapids of Guajibo, the rest of the party remaining stranded on an island for two days until rescued by a passing party of Guajibo Indians.

After a portage of three miles at Maipures a large piragua conveyed the expedition in six days to San Fernando de Atabapo. From there began the arduous voyage on the upper Orinoco. Mr. Miller writes:

Great playas stretched along the banks almost continually, some of them many miles in length. In many of these vast numbers of turtles deposited their eggs at night, which were eagerly sought in the early morning by Indians and "corocoro" ibises. Sand flies, which first became troublesome in Atures, were always present in incredible myriads, making the hours of daylight almost unbearable.

The delta of the Ventuari was reached February 8, and for three days we struggled in the rapids that end in a decided fall named Santa Barbara. The strong north wind and monstrous waves added greatly to the difficulty and danger of running this series of rapids. Numberless islands, some of considerable size and all heavily forested, blocked the mouth of the Ventuari, while the many channels into which the river is divided are thickly sprinkled with granite boulders, amongst which the water swirls and rushes at a terrific rate.

Life on the upper Orinoco at this season is at its height. It was unusual not to pass a number of rubber camps in the course of a day's travel, which always presented a scene of life and activity. It was hard to believe that within a few short weeks all signs of life would vanish and the sites of the camps themselves disappear in a rapidly rising muddy lake.

Daily we strained our eyes for a first sight of the stupendous stone formation which was our goal, and in the afternoon of the 20th we were rewarded with a first faint view

of Duida, the mysterious mount of the Maquiritares. It loomed dim and indistinct in the far distance, a high flat-topped plateau, but presently the mists shifted and revealed two peaks of equal height on the southeast end. A moment later the whole was hidden by rolling masses of vapor.

Toward the Orinoco Duida presents a bold front—a sheer cliff hundreds of feet in height. The seven miles of intervening country between river and mountain consist of marshes and undulating plains covered with a dense growth of thorny vegetation. Progress through such a country is extremely difficult, and upon reaching the base of the mountain at this point it seemed that we should doubtlessly be obliged to make wide detours, as the barren cliffs are apparently unscalable.

It was therefore decided to ascend the Rio Cunucunuma, a small stream coming from the northeast and entering the Orinoco at right angles. Once within the comparatively narrow confines of this caño, the surroundings are vastly different from the Orinoco and as wild and tropical as one could well wish.

The forest is of towering height, generally extending to the edge of the water, forming impregnable walls, covered with a dense and even growth of creepers. Myriads of palms, tall and slender and of many species, rear their heads above the dark green canopy. The water of the stream is of deep reddish color and so clear as to permit of an unobstructed view of the teeming life that flits like shadows over the sandy bottom. Notable among these are rays and electric eels of formidable size, adding very materially to the dangers of navigating the smaller streams.

After seven days of strenuous work the party reached a point about 20 miles from the mouth of the Cunucunuma River and pitched a temporary camp near the mouth of a creek known to the Indians as Sina. Mount Duida was but a short distance away, and the Indians were set to work cutting a trail to its foot. While engaged in this work the first signs heralding the approach of the rainy season appeared, and Mr. Miller writes:

The mists that now perpetually enshrouded Mount Duida assumed a deep gray tint and there sprung up suddenly and at frequent intervals cold winds that swept over the forests with cyclonic velocity—bringing many of the great forest trees crashing to the ground—accompanied by vivid flashes and ominous rumblings that clearly told of the forces at work among the lofty peaks.

The Maquiritares, in common with many tribes of South American Indians, are imbued with the belief that the mountain fastnesses are the abode of evil spirits, and at the first clash of the elements our Indians showed great uneasiness, finally disappearing under cover of night, taking the boat. Their departure, while appalling at first thought, was not a serious matter on account of the close proximity of Yacare, to which numbers of Indians would return at the close of the rubber season, but a few weeks off. Provisions and ammunition we had sufficient for 6 or 8 months.

After only a few days Mr. Iglseder suffered a severe attack of beriberi, and in order to save his life the expedition had to be abandoned at once, the return trip to Fernando de Atabapo consuming but nine days. In conclusion Mr. Miller writes:

The collections of birds are large and have yielded a number of new species and one genus new to science. Other results of the expedition are most interesting and surprising. Mount Duida is not the isolated mountain "island" as was supposed, but is connected with the mountains of the Ventuari and Parima Ranges by a series of hills. Its elevation is comparatively low, being less than 6,000 feet. Any attempt to reach the top, which to all appearance is rugged bare granite, should be made from the west, as the slope is gradual and forested for a considerable distance up.

Beef from South America and Australia, by Arthur Wallace Dunn, in the January issue of the American Review of Reviews, is an excellent study of the meat situation in this country and the probable effect on the price of beef to the consumer by letting down the bars to the foreign production under the new Underwood tariff law. Mr. Dunn gives an accurate and conservative account of the cattle industry of Argentina, basing his conclusions largely upon the report of Dr. A. D. Melvin, Chief of the Bureau of Animal Industry of the Department of Agriculture, who was sent to South America by Secretary Houston to investigate the meat-producing conditions. To those who have looked forward to a material reduction in the cost of living in consequence of the new tariff, Mr. Dunn's conclusions as to its effect on beef will doubtless be disappointing. He proceeds to throw the following damper on such hopes in his opening paragraph:

Although 30,000,000 pounds of South American beef came into the United States during the first month the new tariff law was in operation, and meat producers in Argentina have made arrangements to enter the American market, it does not follow that this country is going to be overrun with importations of meat because the duty has been removed. Furthermore, while the South American product may be sold for a time at a few cents less per pound than beef produced in this country, it is not at all likely that the price of meat will be reduced to any appreciable extent or remain long upon a lower level on account of the supply from foreign countries.

After explaining Dr. Melvin's mission to South America and that his investigation extended not only to methods of inspection, but also to the raising of cattle, the sale of beeves, and the production of meats for markets in Europe and the United States, he continues:

Meanwhile Secretary Houston gave careful consideration to the problem of meat production in this country. He epitomized the condition in a sentence: "The man with the lariat has given way to the man with the hoe." The day of the big range has passed. The farmer has pushed the stockman farther and farther among the foothills and mountains, until at the present time the latter is left with only such feeding ground as can not be converted into farm lands by irrigation and other improved methods of farming. It is a matter of grass. The sod has been turned over, and grains and vegetables are produced where before there was pasturage and meadow. There is a shortage of grass for the stock in summer and a lack of grass to make hay for the stock in winter. The feeding of corn will not make up for the loss of grass and is much more expensive. Consequently this accounts, in a large measure, for the disproportionate production of meat animals compared with former years and the increase in the price of all meats.

Dr. Melvin found the conditions reversed in Argentina. There the grain farmer has given way to the cattle raiser. The ranges with cattle running wild, rounded up from time to time by the vaqueros, do not produce the beef which supplies such a large portion of the European market, nor a surplus which meat consumers in this country expect to be sent to the United States and to cause a reduction in the price. The days of the wild longhorns on the pampas have passed, just as the ranges are things of the past in the United States. A part of the pampas and much of the land formerly under cultivation for cereals have been planted in alfalfa, and this alfalfa feeds Durhams, Herefords, and Polled Angus cattle, which makes South America the rival of North America in the production of meat. Alfalfa is both food and grain

in Argentina. The cattle grow and fatten ready for market on this grass. There is also a wild grass which grows with the alfalfa, and is not killed by frost, which furnishes feed for the cattle in the winter months. Hay is not necessary, though a certain amount is cured in order to meet drought conditions which sometimes destroy the alfalfa fields.

In the production of meat on the hoof the Argentine growers have a very great advantage over those of the United States in the matter of cost, especially after the land has been turned into alfalfa pasturage. * * *

The cattle farms of Argentina are very large, a ranch covering many square miles. Generally it is equipped with a ranch house, the home of the owner or superintendent. In the center of four large tracts of pasturage is a windmill which pumps water that flows in different directions and supplies the herds in the four pastures. Comparatively little care is given the cattle except in the matter of breeding, where particular attention is paid to securing the best stock. While Dr. Melvin was in Argentina he attended a fair where a Durham bull was sold for \$35,000 gold. The beef raisers of that country have learned that it pays to produce the best.

Although the herds which feed upon the alfalfa are very large, they never exhaust the supply unless there is a drought. In summer the cattle seem to be standing knee-deep in pasture of which they eat until they can eat no more. And they get very fat. The cattle owners say the breeding cows get too fat, and it is often desirable to keep them in less luxuriant pasturage.

In speaking of the cattle lands of Argentina the author continues:

For years these lands were the famed pampas, level as the sea for miles and miles, upon which grazed herds of wild cattle which produced stringy beef. The later generations have applied scientific methods; secured the best beef-producing cattle; turned the pampas into alfalfa pasturage; and made fortunes out of their beef.

These lands a few years ago sold for \$10 per acre. They are now worth from \$75 to \$100 per acre, according to their location. No attempt has been made toward improvements beyond building the necessary houses for headquarters which the foreigners call camps. The plains are treeless except where groves have been planted. Just a sea of pasturage covered with cattle as far as the eye can reach; a level plain of moving herds and waving grass, without hill, mountain, or line of timber to break the monotony of the scene.

The Argentine beef producers are favorably situated for their business. These vast plains of pasturage stretch westward from Buenos Aires 125 miles, and much farther north and south, and are within easy reach of a tidewater market. Most of the cattle are produced within 75 miles of Buenos Aires, and many of the stock farms are near the Rio de la Plata and the Parana. Some of the abattoirs are on the banks of these streams, and where the water is not deep enough for ocean steamers the beef is loaded in barges and transshipped. The packing establishments are situated at the water's edge. In the matter of transportation Argentina has a great advantage over the United States, as rail shipments are required only for short hauls.

Coming to the question as to whether Argentine beef will invade the markets of the United States Mr. Dunn writes:

It might reasonably be supposed that the packers who have heretofore handled Argentine meats would, when they found their beef territory and European markets invaded by the Americans, take the first opportunity to find a new market. That market is in the great meat-consuming country, the United States, which is accessible under the new tariff law. The Argentine packers are, in fact, seeking United States markets. A part of the 30,000,000 pounds imported during the first month of the new tariff was supplied by Argentine and English packers. Already three steamships of the Nelson Line, fitted with refrigerator compartments, have been added to the Lam-

port and Holt Line, which operates between New York and Buenos Aires, and are expected to carry large quantities of Argentine beef to the United States. A margin of 3 cents a pound in favor of Argentine meat is possible, but the shippers are figuring on 1 cent a pound, and with that advantage believe they can maintain competition with beef produced in this country. Their experience with the American packers in Argentina has made them somewhat apprehensive of results, for the price at which they sell meat in this country may be met with a cut in the price by the Americans in order to keep them out of the market or to make their efforts unprofitable.

Another phase of the question he deals with as follows:

Another phase of the South American situation is the question whether there is likely to be such an increase in the product of cattle as to bring down the price of beef. It does not seem possible. As cattle are now raised in Argentina the increase must be gradual. The time necessary to open pasture lands and produce cattle ready for the market is so long that no sudden change in prices is possible by increased production. The cattle raisers of South America do not believe it would be advisable to make strenuous efforts to increase their output by resorting to the ranges or investing large amounts in opening new pasturage. There is not an unlimited supply of wild cattle on the pampas of Argentina, nor in the hills of Uruguay, nor on the plains of Brazil, as some of our people have imagined. * * *

Many years ago the wild cattle of Argentina were there. Owners of vast tracts of land had millions of head of cattle roaming the pampas. But that was at a time when cattle were killed for their hides and tallow. Refrigeration had not made it possible to ship beef, and when refrigeration came in it was found that the beef was not marketable. Then came the great change from wild wiry cattle to thoroughbreds; from pampas grass to alfalfa; from vast plains of undecided ownership to fenced pastures. And with the change came the inevitable law of nature that production is most profitable when it scarcely meets the demand. That the stock raisers of Argentina will attempt to increase their output largely is not likely unless they foresee a largely increased demand. And even with such effort as they may make to increase their product it will be impossible to make the increase appreciatively felt in the meat-consuming regions of the world through a reduction of prices.

Notes on the Commercial Geography of South America, by Walter S. Tower, is the leading article in the Bulletin of the American Geographical Society for December, 1913. Since commercial possibilities are the chief factors stimulating general interest in South America, Mr. Tower takes occasion to point out in his carefully studied and comprehensive article that in the growth of existing trade relations geographical influences have been prominent, and in considering possibilities of commercial expansion various geographical aspects of the continent must be kept in mind. The purpose of the article is therefore to show the larger relations between South American geography and commerce.

Among the many things affecting the commerce of the continent, the following are especially considered by the author: (1) The distribution of the population, its density, and its character, particularly as regards producing capacity and purchasing power; (2) the location, extent, character, and resources of the productive areas; (3) the accessibility of the continent and its various parts or the influence of coast lines, topography, and rivers on transportation facilities; and (4) the location of the continent with respect to other lands.

In dealing with the matter of sparseness of population and its unequal distribution, Mr. Tower gives several very logical reasons explaining the conditions and enumerates some of the retarding influences. These influences, he states, for the most part no longer apply, and it may be assumed logically, therefore, that South America eventually will have a population more nearly proportional to its area. That fact alone means great possibilities of commercial expansion. If the vast interior areas can be populated even as densely as the borders now are, great advances in commerce ought to result. Means of transportation are the things most needed; and when they are provided for the interior sections, there will be much increase and spread of population.

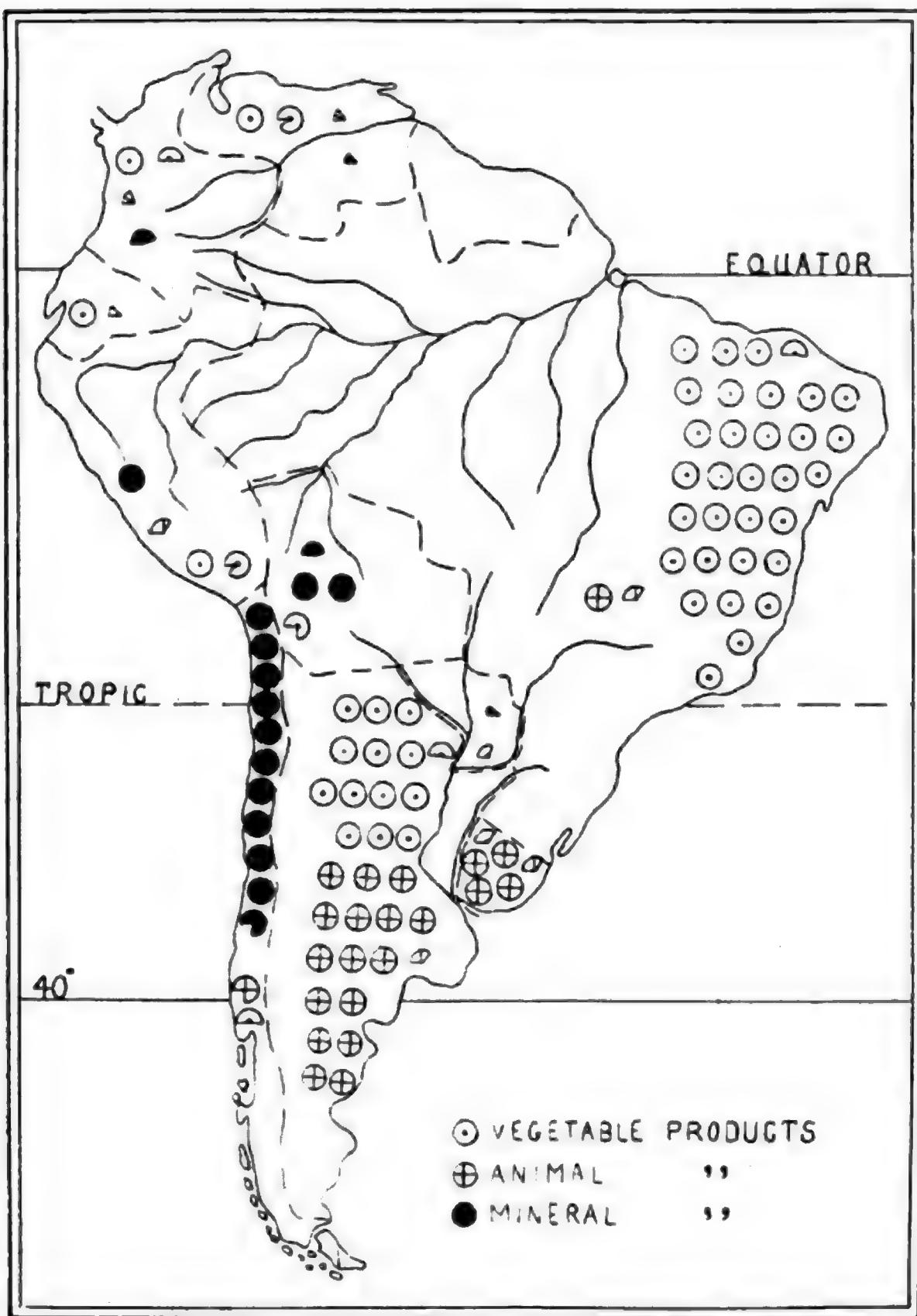
As to productive areas South America ranks high among the continents in relative extent of potential productive area, for next to Europe it loses the smallest share of its area from aridity and from polar cold (not more than one-eighth), and has the largest share of broad low plains (more than half). While the deficiency in coal, as compared with North America and Europe, is noted, the author states that some large water-power resources offer partial compensation for the lack of coal.

As to accessibility, Mr. Tower writes:

As far as mere access to its coast is concerned, South America is unsurpassed, for no part of its coast is truly inaccessible. In general, however, its coast line is too regular (less than twice as long as the shortest line capable of inclosing its area) and too extensively bordered by abrupt highland barriers to have the greatest commercial value. For these reasons only a few places have a combination of good harbors and good routes to the interior. Rio de Janeiro, for example, has a magnificent harbor, but from it a rather abrupt ascent is necessary to reach the interior. Buenos Aires, on the other hand, has unsurpassed ease of access to the interior, but many millions of dollars have been and still are being spent to give it a good harbor.

This handicap of regular coast and bordering highland is partly offset by the three great systems of navigable rivers, the Amazon, the Rio de la Plata, and the Orinoco, a combination which, for natural commercial efficiency, is equaled by no other continent, though the area which the Amazon serves presents many difficulties to general development. It must be noted also that railroad building across the great interior lowlands will be extremely easy (because of topography) except where the problems of the equatorial forest or extensive annual floods must be overcome. Neither of these difficulties is as serious as the general absence of fuel to operate great railroad systems.

As to the value of South American commerce the author gives an able analysis of its present condition and future prospects. He states that in proportion to its size and its population South America is commercially more important than Asia, for Asia has a total foreign trade less than twice as great as that of South America, while its area is two and a half times and its population more than sixteen times as large. He places the total trade of South America for 1911 at about \$1,835,000,000, made up of \$942,000,000 of exports and \$893,000,000 of imports. The balance of trade in favor of the



SOUTH AMERICAN EXPORTS.

Map showing distribution, by countries, of the three main classes of South American exports. Each circle equals \$10,000,000. Amounts of less than \$1,000,000 (animal products for Bolivia and for Ecuador; mineral products for Argentina, Uruguay, Paraguay, and Ecuador) are not shown. (From *Notes on the Commercial Geography of South America*, by Walter S. Tower, in the December issue of the *Bulletin of the American Geographical Society*.)

continent he states is partially offset by interest payments to foreign holders of loans and investors of capital and by freight charges paid the foreign carriers engaged in South American trade, and makes the following comments on this feature:

This condition is the logical one for regions which have not gone beyond the first stages of exploiting their natural resources, as is the case in all of South America. Furthermore, this condition will probably continue for a long time, because (1) there are large areas and extensive resources as yet hardly touched; (2) these chances for internal development will keep most of the native capital at home and attract more foreign capital; (3) government loans placed abroad are likely to increase, as more funds are needed for public works; and (4) most of the carrying trade of the continent will remain largely in foreign hands as long as South American capital can find investment in ventures more profitable than ship owning.

In comparing the exports with imports Mr. Tower emphasizes the marked contrast in their character. The exports are almost entirely the products of the farms, ranges, forests, and mines; materials for manufacturing and food-stuffs. Manufactured wares are noticeably absent, because most sections of the continent offer the people better returns from exploiting natural resources than from factory labor. The major part of the export trade is made up of about ten kinds of commodities, as follows: Coffee, nitrate, rubber, wheat and wheat flour, wool, hides and skins, meats, metals (gold, silver, copper, tin, and platinum), linseed, and cacao. The fact that only three of these, coffee, rubber, and cacao, are tropical products in the sense that they are produced only in the Tropics, shows that South American exports, notwithstanding that three-fourths of the continent is tropical, are largely nontropical products.

The imports of South America are mainly manufactures of many sorts. Of these two classes of wares stand out prominently, textiles and the manufactures of steel and iron. Iron and steel manufactures exceed 10 per cent of the total imports. Cotton manufactures exceed in value all other textiles, and equal about 10 per cent of the total imports. For the climate of most of the continent cotton goods are more suitable than woolen, and being cheaper than linen and silk, cotton supplies the only suitable textile within the purchasing power of perhaps half the people. Textiles other than cotton are a close third, and coal probably is fourth, in value. But the combined values of these four leading groups is not more than two-fifths of the total. It appears, therefore, that a great many wares, in varying amounts, make up South American imports.

The article embraces an analytical study of the commerce of the east and west coasts respectively, the concentration of the east coast trade in groups of ports, the contrast in the products exported from the two coasts, contrasts in port equipment, and a study of the trade with Great Britain and the United States. Taken in its entirety it is a fair and conservative study of the commercial conditions

of the continent and the future development of the vast resources of the continent.

Our Opportunity in Latin America, by James Drey, in the December Neale's Monthly, is an excellent exposition of the present status of our commercial relations with the Latin American countries. Mr. Drey, in introducing his subject, deals with the significance and purpose of the recent South American tour of the Boston Chamber of Commerce, as follows:

The splendid expression of enterprise upon the part of Boston's chamber of Commerce evidently was born of the broadest conceptions of the functions of commerce. Understanding commerce to be most distinctly concerned with the economics of distribution, and believing the special functions of commerce to be the making and the holding of markets and the development of systems of distribution and trade which shall supplement and complete the work of home production, the chamber sought in the most direct and practical way an intelligent comprehension of economic conditions in the territory with which its members would engage themselves in the work of distribution and exchange. And by this personal visit participated in by so many of its members the chamber hopes to do much toward establishing with the 20 republics of Latin America a broad brotherhood of international friendships and interests.

Boston business interests are appreciative of the discerning vision of John Barrett, Director General of the Pan American Union. The courage, the hopefulness, the optimism of his appraisement of Latin America's possibilities and potential greatness, were sources of much of the inspiration for the Boston Chamber's undertaking. Probably his prophetic views could reach few more ready to give them respectful hearing than the chamber's president, Mr. James J. Storrow, a citizen of Boston, to whose constructive leadership his city is largely indebted for its present era of both commercial regeneration and civic reconstruction. And any reference to men instrumental in promoting a Pan American sentiment in Boston should include mention of the energizing influence of Mayor Fitzgerald, who, even since the close of the war with Spain, has been positive in his convictions and outspoken in his advocacy of Latin America as a market prolific in opportunities for American trade expansion. As a significant part of his endeavors he has sought to promote the study of the Spanish language and literature in the Boston public schools, in order that Boston commercial interests may find the youth of the city intelligently prepared to meet Latin American opportunity upon its own ground, and with an insight into the life and usages of the people rather than as strangers to their temperament and their customs.

After dwelling briefly upon the remarkable development of Latin American commerce within the last decade, and analyzing the conditions which have made European countries the dominating factors therein, the writer continues with the following admirable suggestions to the commercial interests of the United States:

If we are to meet these conditions that are adverse to our commercial progress it would seem that we are most likely to be successful by adapting ourselves to them. We can hope to gain but little by ignoring them. Clearly our first endeavors should be directed toward stimulating at home in the United States a proper appreciation of Latin America and her peoples—of their impulses, their ambitions, and their achievements. We should show our sincere respect for her success in advancing both general and higher education; in developing stable government, both national and municipal; in promoting scientific research and invention; in solving great social and economic problems; in making her own admirable literature, both historical and

romantic; in building great universities and hospitals and splendid museums, both of art and science—in short, we should show our respect for Latin America's contribution in the making of the world and in the greatness of the world.

Probably our appreciation of Latin America can most convincingly be shown by more travel to Latin America from the United States, and by encouraging an exchange of courtesies between the leaders of thought and action in our own country and in those of Latin America. North Americans of high position in public life and of influence in literary, educational, scientific, and commercial affairs should go to Latin America.

In concluding his interesting and thoughtful article Mr. Drey writes:

Added to every other inciting influence for increased trade relations between the United States and Latin America is the new impetus given by the opening of the canal. The canal should make plain to the commercial interests of the world, and particularly to those of the United States and Latin America, that the world is becoming a commercial unit, and that the peoples of the world—regardless of political boundaries, of racial differences, and of national ambitions—are rapidly forming one great economic organism. The Boston Chamber of Commerce is endeavoring to impress upon the people of Latin America that both they and we are parts of that organism, that we would know them better, that we are ready to supply their needs, and that we would have them know us better, in order that they may better supply our needs.

The Jurisprudence of Latin America, by Hannis Taylor, in the October, 1913, issue of the Virginia Law Review (University of Virginia, Charlottesville, Virginia) is an able article in which this distinguished international lawyer and experienced American diplomat sets forth with much originality and great learning one of the most interesting features of the civil and political organization of Latin America, a characteristic which hitherto had passed unnoticed. First the writer describes the public and private law of Rome, of which only the latter has survived. This private law had adapted itself to the changing conditions of intervening centuries and had been gradually handed down through the royal codes and customs to serve as a basis for the private law of the regimen arising out of the French Revolution. The author then shows with historical precision the influence of the Anglo-Saxon public law on the modern world. He points out how it brought about the substitution of the Roman concept of the city for that of territorial nationality, the nucleus of which is none other than the acknowledgment of the guaranties of the citizen, representative government, and the establishment of parliamentary power. The author also indicates the evolution of the Anglo-Saxon public law in the original colonies that formed the American Union. This evolution resulted in the establishment of the Federal Government upon those solid principles which, from the time of Magna Charta, had forever assured in England the predominance of liberty over the absolute power of kings.

At first sight it would seem to be a paradoxical statement that, in the new Latin world, there should arise as a synthesis of its social

and political organization a blending of the private law of Rome with the American modifications of public Anglo-Saxon law. Aside from this, such a phenomenon is the expression of a reality, sagaciously set forth in the spirit of the jurist and the sociologist by the distinguished international authority referred to. At the dawning of their independence the Latin-American States certainly hastened to adopt as a basis of their political organization the standards which animate the Constitution of the United States. But it is necessary to note, without the desire to belittle the power of attraction exercised on Latin Americans by the radiant light which from the land of Washington illuminated their first steps, that the ideas of representative government reached the Spanish and Portuguese possessions through the channels of the municipal governments or "cabildos," bodies which in the Iberian Peninsula represented, down to the middle of the sixteenth century, the cradle of popular liberties and the strong arm of legislative power. Neither is it inopportune to bear in mind that a century before the English Parliament was convoked by Simon de Montfort, the Castillians had established their own parliament in the ancient city of Burgos, and that the revolutionary movement in Latin America was exclusively the work of the municipal councils or "cabildos;" that is to say, of the municipal entities against which the iron and dominant will of Carlos V had to contend in Spain.

In regard to the civil law, the transition was not so rapid in Latin America, and the ancient Castilian and Portuguese laws and ordinances, the immediate sources of which were the institutes and the pandects, were not supplanted by the codes, which had as their model the Napoleonic Code, but this occurred many years after the proclamation of independence. At all events, the political Anglo-Saxon-American structure is acclimated and flourishes with little variation in the ancient domains of Castile and Portugal, and by its side, and without the contact causing any conflict whatever—a beautiful and enchanting spectacle which should captivate the attention of many persons—the green branches of Latium's old tree, grown from the shoot which the conqueror planted in America, extend their protecting cover over the family and property. The Latin spirit of unity and the Anglo-Saxon spirit of liberty form, in this manner, a beautiful union throughout all Latin America.

Mr. Taylor's article is worthy of the highest praise, not only because of the originality of its concepts, but because of the precision of his points of view and for the philosophic-juridic spirit with which it is inspired.

Simon Bolivar and the Bolivar Family, by L. Duarte Level, in a recent issue of the *Gaceta de los Museos Nacionales* (Caracas), is an interesting story in Spanish of the famous liberator and his wonderful accomplishments.

Iron Ore Deposits of Chile, by Carlos Vattier, in the December 6 issue of the Mining and Scientific Press (San Francisco), is a translation from the Boletin de la Sociedad Nacional de Minera. The article treats of the various mining regions and their development, which of late years have become very active with a most promising outlook.

European Settlements in the Lesser Antilles, by Carl Sapper, in the October number of the Revista Economica (Tegucigalpa), is the third of a series of articles on the subject, the present one dealing with sanitation and the possibilities for further colonization by Europeans.

La Industria Frigorifica en La Plata in a recent issue of Revista de Bancos, Ferrocarriles, Seguros y Comercio (Buenos Aires), is a short history of the development of refrigeration in the various cities and towns of the Plata region of South America.

El Potomac en La Plata, by Francisco Centeno, in the November number of Revista de Derecho, Historia y Letras (Buenos Aires), is an article written in Spanish and deals with public questions brought prominently to the front in Argentina by the visit and reception of Col. Roosevelt. The writer goes back to the days of 1810 and reviews international progress in an interesting style, mentioning the work of numerous statesmen and quoting the words of Director General Barrett, when the latter was received as the American minister by the President of Argentina.

The Temple of the Jaguars, by Edward H. Thompson, in the October number of The American Museum Journal (New York), is a report of the work preliminary to the reproduction of the front façade of this ancient Yucatan temple. The writer has prepared drawings and selected a number of photographs which will aid in reproducing the work at the Columbus Avenue entrance to the museum in New York.

El Arte en La Argentina, by R. Leguizmon, in the Revista Mensual Ilustrado (Buenos Aires), describes and illustrates some of the famous paintings of Argentina. A picture of O. Pinto is shown as well as some of his work, which has many admirers.

Shoe Manufacturers' Opportunities in Cuba forms the subject of an article in the Cuba Review for October, in which many interesting facts are set forth which should be of special interest to shoe manufacturers in this country.

New Steamship Line to Brazil is the title under which the Brazilian Review of Rio de Janeiro (October 14), tells of the new line of ships that the American & Cuban Steamship Co. proposes to establish between New York and Brazilian ports.

Leading Bolivian Tin Mines is an interesting short article on the progress of this industry in Bolivia in the Mining Journal of London

for November 1. Various properties are mentioned and the output of many mines are given, all of which show activity in mining circles.

Among a Forgotten People in Brazil, by Frederick C. Glass, in the December issue of the *Missionary Review of the World* (New York and London), is a most interesting story taken from the author's "The Neglected Continent." The extract deals with experiences in the far inland center of Goyaz where very few white men live. The author of this story was traveling with a native companion in a "dug out" canoe; they arrived at an Indian village and had strange experiences, some of which are related in the article.

Hitting .300 in Havana, by Bozeman Bulger, in the January number of *Adventure* (New York), describes the progress of baseball in Cuba, which is rapidly taking its place as a national game in that country.

La Republica Argentina en la Exposicion de San Francisco forms the subject of an article in *El Comercio Latino-Americano*, of Buenos Aires, in which Argentina's preparations for the great fair are discussed, and in which marked interest is shown.

Queer Beasts and Birds of Peru, by Millicent Todd, in the December number of *The Forum* treats of beasts and birds of both the highlands and lowlands. Of the former the dignified llama comes in for attention, while the condor in his loneliness "sweeps down upon his prey with a deafening whir of wings." Stories of many other denizens of the air and forest are interestingly told.

Inauguracion del F. C. de Buenos Aires a la Asuncion (railroad from Buenos Aires to Asuncion) in the October 31 number of *Fray Mocho*, of Buenos Aires, tells pictorially of the inauguration of this through rail route between the two cities mentioned. This new service will be a very important commercial movement in developing both passenger and freight traffic and is looked upon with great expectations. It places the Paraguayan capital, 934 miles distant from the Argentine metropolis, in much quicker contact than the service afforded by the river steamers which have heretofore carried most of the traffic.

El Hombre mas Popular del Mundo (The most popular man of the world) is the title under which *Fray Mocho*, of Buenos Aires, for October 31, describes Col. Roosevelt's visit to Argentina. Numerous pictures are shown depicting his life from the student at Harvard to the White House, and from his African hunting expedition to his South American trip.

El Tesoro de Istchimbia is the title under which *Ilustración Puruana* (Lima) of November 16 tells of the prehistoric reliques found recently in tombs of Ecuador. Half a dozen pictures show these curios as well as the location in which they were found.

Centro America, Vol. V, the organ of publicity of the International Centro-Americana, published in Guatemala City, contains many timely articles, such as the International Railway of Guatemala,

Panama Canal, Ruins of Utatlan, statistical news of the various countries, etc.

La Ganaderia Argentina forms the subject of an article in October Mercurio (Barcelona) dealing with Argentina live stock. Many illustrations show the splendid stock which have brought the industry to be one of the greatest of any country.

Steaming Southward, by Theodore Roosevelt, in the Outlook for November 29, is the first of a series of articles which the ex-President will contribute to this magazine. The present article takes up the voyage from New York southward and the incidents of stops at several ports before reaching Brazil.

Recreation Activities in Uruguay, by P. A. Conard, in the Play-ground, of New York, for December, tells what Uruguay is doing in this line of educational work. The writer represented the national committee of physical education of Uruguay at the seventh annual meeting of the Playground Association of America, at Richmond, Virginia, and the present article is an extract from his address on that occasion.

An Anatomical Study of the Spanish Bullfight, in December Current Opinion tells of the efforts of humanitarian organizations of France and England to suppress the "horse tragedy" during the bullfight. To those who have never seen a bullfight the description of the various phases will be of interest.

The Transandean Railway from Arica to La Paz, by G. H. Sawyer, of Arica, Chile, in the November issue of the Engineering News (New York), is a technical article descriptive of this new railroad and its history, general features, repair shops, bridges, water service, etc. Several diagrams and pictures give a better understanding of the work of constructing the road.

Manufacturing News, of Chicago, for the month of December devotes several pages to the program of the Illinois Manufacturers' Association to South America, an excursion which will sail from New York on February 7 for a visit of several weeks to cities of the eastern section of the continent.

The Cordillera of Peru, by Milicent Todd, in the January Forum, is a short story of the great mountains and the impressions made upon the writer, who visited Peru several months ago.

Position Indicator System and Machines for the Panama Canal Locks, by E. H. Jacobs and H. M. Stevens, in the January General Electric Review (Schenectady, New York), is a scientific article dealing with the practical side of the operation of the canal locks. Both gentlemen are connected with the General Electric Co., and their study of the matter will doubtless be appreciated by the profession and by the general reader who is interested in this wonderful mechanism.

SUBJECT MATTER OF CONSULAR REPORTS

REPORTS RECEIVED UP TO JANUARY 15, 1914.¹

Title.	Date.	Author.
ARGENTINA.	1913.	
Wool statistics.....	Oct. 20	R. M. Bartleman, consul general, Buenos Aires.
CHILE.		
Market for heating apparatus.....	Oct. 15	Charles L. Latham, consul, Punta Arenas.
Annual report on commerce and industries, 1912.....	Oct. 29	Do.
American interests in Chile.....	Nov. 10	Alfred A. Winslow, consul, Valparaiso.
Present methods of mining, treating, and refining nitrate and salts.....	do.....	Do.
Fuel in Chile.....	do.....	Do.
Trade notes.....	Nov. 18	Do.
COLOMBIA.		
Law providing for opening of bar at mouth of the Magdalena River.....	Dec. 4	Isaac T. A. Manning, consul, Barranquilla.
CUBA.		
Cuban ramie fiber.....	Nov. 25	J. L. Rodgers, consul general, Habana.
Shoe business in consular district.....	Dec. 13	Harry C. Morgan, vice and deputy consul, Santiago de Cuba.
DOMINICAN REPUBLIC.		
Sugar production in the Republic.....	Dec. 1	Wm. Walker Smith, consul general, Santo Domingo.
ECUADOR.		
Annual report for 1912.....	Nov. 6	Charles F. Baker, vice consul general, Guayaquil.
GUATEMALA.		
Report on imports of watches and clocks.....	Nov. 26	William Owen, vice and deputy consul general, Guatemala city.
Report on cacao.....	Dec. 22	Do.
HONDURAS.		
Copy of Boletin de la Secretaria de Fomento, Obras Publicas y Agricultura.	Nov. 10	A. T. Haeberle, consul, Tegucigalpa.
MEXICO.		
Annual report for 1912.....	Nov. 25	A. J. Lespinasse, consul, Frontera.
Report on vehicles.....	Nov. 27	Richard M. Stadden, vice consul, Manzanillo.
PANAMA.		
Construction notes.....	Nov. 25	James I. C. Kellogg, consul Colon.
Bonded and private warehouses in Panama, Colon, and Bocas del Toro.	Dec. 4	Do.
Construction work (new municipal building).....	Dec. 15	Do.
PERU.		
The coconut industry in Peru.....	Nov. 1	Luther K. Zabriskie, deputy consul, Callao.
VENEZUELA.		
Report on vehicles.....	Nov. 16	Thomas W. Voetter, consul, La Guaira.
Improvements in La Guaira Harbor.....	Nov. 24	Do.

¹ This does not represent a complete list of the reports made by the consular officers in Latin America, but merely those that are supplied to the Pan American Union as likely to be of service to this institution.

COMMERCE OF BOLIVIA FOR 1912

THE foreign trade of Bolivia for 1912, according to the message of the retiring President of the Republic, Eliodoro Villazón, to the National Congress at the opening of its regular session in August, 1913, amounted to 139,631,977.06 bolivianos, of which 49,508,989.96 bolivianos were imports and 90,122,987.10 bolivianos were exports.

The figures for the preceding year were: Imports, 58,371,409.26 bolivianos; exports, 82,631,171.56 bolivianos; total, 141,002,580.82 bolivianos. This shows a decrease of 8,862,419.30 bolivianos in imports and an increase of 7,491,815.54 bolivianos in exports, or a net decrease in the foreign trade of 1,370,603.76 bolivianos.

The value of the boliviano is approximately 39 cents United States currency ($12\frac{1}{2}$ bolivianos = £1 sterling). On this basis the figures represent in United States gold for the year 1912—imports, \$19,308,506.08; exports, \$35,147,964.97; total, \$54,456,471.05; and for the year 1911—imports, \$22,764,849.61; exports, \$32,226,156; total \$54,991,005.61. The decrease for the year in imports was \$3,456,343.53; the increase in exports, \$2,921,808.97; or a net decrease of \$534,534.56.

IMPORTS.

The imports for the years 1909, 1910, 1911, and 1912, by countries, were as follows:

Countries.	1909	1910	1911	1912
Germany.....	\$1,644,154	\$3,304,300	\$4,021,264	\$6,440,316
United Kingdom.....	3,078,796	6,361,800	4,863,318	3,537,111
United States.....	4,240,706	2,145,506	3,847,200	1,791,916
Chile.....	1,290,465	3,089,110	3,836,552	1,553,080
Peru.....	988,249	1,011,350	1,076,165	1,474,662
Argentina.....	659,570	618,816	1,255,635	1,181,376
Belgium.....	611,545	1,380,834	1,584,942	1,002,535
France.....	577,062	422,295	1,104,391	949,885
Italy.....	388,762	351,377	553,956	553,899
Brazil.....	92,359	189,414	328,605	486,889
Spain.....	116,174	75,889	172,865	215,268
Ecuador.....				50,333
Portugal.....			39,332	22,713
Uruguay.....	88,249	36,507	62,630	16,699
Other countries.....	620,316	45,736	17,994	31,824
Total.....	14,405,407	19,032,934	22,764,849	19,308,506

Imports were classified prior to 1912 under eleven general heads, as follows:

	1910	1911
<i>Animal products and manufactures.....</i>	<i>Bolivianos.</i>	<i>Bolivianos.</i>
Vegetable products and manufactures.....	3,668,757.75	9,081,844.49
Mineral products and manufactures.....	11,233,198.77	12,497,512.19
Textiles and manufactures.....	19,286,056.81	19,992,493.86
Paper and manufactures.....	6,353,544.59	7,219,180.45
Drugs and chemical products.....	585,925.34	1,607,051.63
Liquors, wines, and other beverages.....	464,676.58	577,157.47
Machine tools and hardware.....	1,590,981.50	2,191,837.99
Carriages and other vehicles.....	1,356,135.28	2,554,661.06
Arms and explosives.....	125,533.17	561,275.21
Articles not classified in the tariff.....	4,029,537.19	2,026,414.87
	108,047.57	61,980.04
Total.....	48,802,394.55	58,371,409.26

In 1912 the classification was under five headings, as follows:

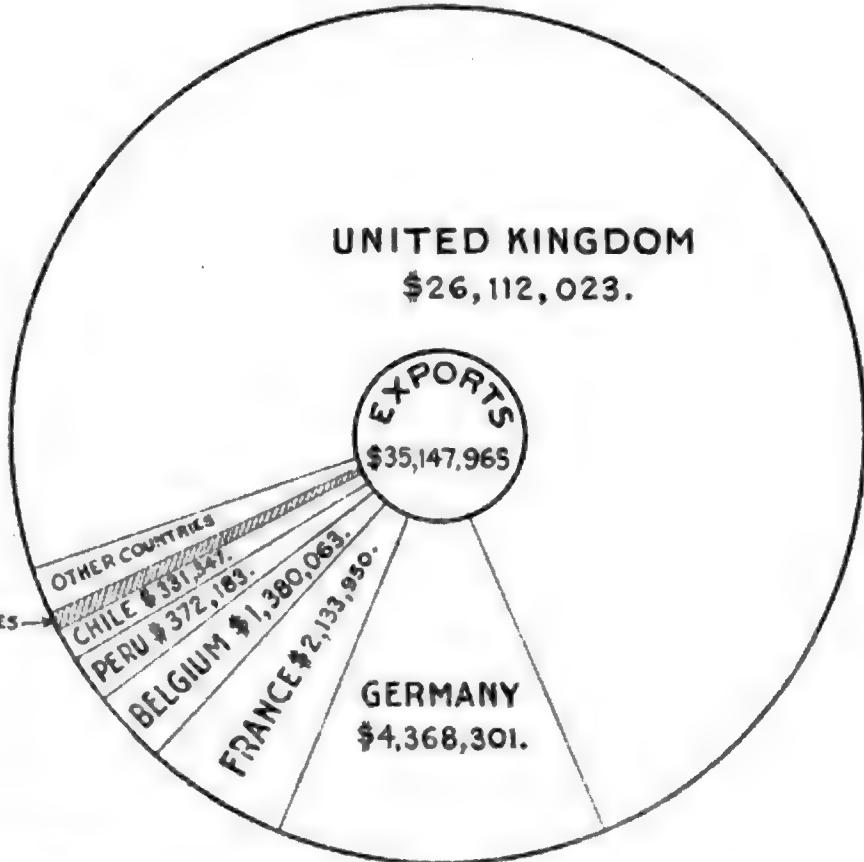
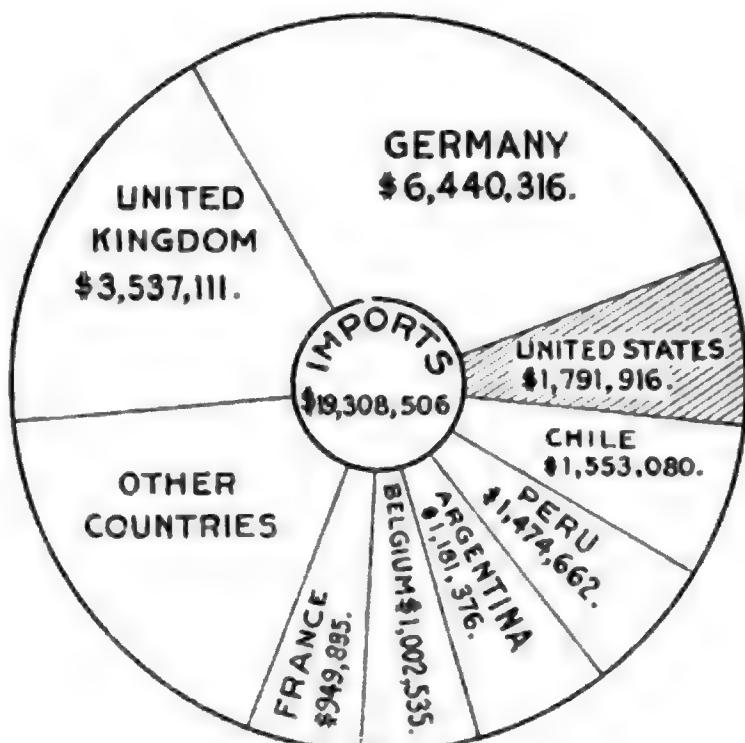
	Bolivianos.
I. Live animals.....	2,106,263.80
II. Food products and beverages.....	11,412,604.66
III. Raw and slightly wrought material.....	3,375,064.94
IV. Manufactured articles.....	32,339,781.56
V. Gold and silver, unmanufactured, gold and silver coin.....	275,275.00
Total.....	49,508,989.96
Value in United States gold.....	\$19,308,506.08

Of the total imports for 1912, goods to the value of 35,367,169 bolivianos were dutiable. There were exempt from duty imports valued at 14,141,820 bolivianos. In 1911 the dutiable merchandise amounted to 26,290,966 bolivianos and the nondutiable to 32,080,442. The decrease in 1912 in the value of the merchandise admitted free is due to the duty of 2 per cent on goods hitherto admitted duty free imposed by a law which went into effect January 1, 1912.

As yet no figures in detail for the last six months of the year 1912 under the foregoing classifications are available. The imports for the first six months, by articles and classes, according to statistics prepared by the director general of customs, are as follows:

	Bolivianos.
Live animals.....	15,987.80
Food products and beverages:	
Sugar, refined.....	1,051,925.14
Other sugar.....	58,281.36
Wheat flour.....	883,801.45
Lard.....	54,328.39
Fish, canned.....	125,547.57
Barley.....	46,573.80
Rice.....	154,968.90

BOLIVIA COMMERCE 1912. \$54,456,471.



Food products and beverages—Continued.

	Bolivianos.
Food pastes.....	78, 335. 30
Fruits, fresh and preserved.....	119, 198. 36
Spices.....	58, 571. 37
Meats, preserved.....	38, 818. 96
Edible oils	32, 246. 62
Aerated waters.....	345, 453. 19
Sparkling wines.....	75, 605. 00
Heavy wines.....	136, 496. 60
Common wines.....	108, 981. 23
Beer, cider, etc.....	49, 072. 10
Other beverages.....	39, 848. 63
All others.....	291, 632. 84
	3, 749, 686. 81

Raw and slightly wrought material:

Building lumber.....	167, 709. 61
Mineral oils.....	65, 073. 21
Coal.....	612, 428. 54
Cement.....	153, 331. 00
All others.....	131, 346. 28
	1, 129, 888. 64

Manufactured articles:

Soap.....	93, 583. 30
Candles.....	358, 415. 91
Cosmetics and perfumery.....	44, 319. 57
Paints and varnishes.....	112, 433. 32
Proprietary medicines.....	111, 279. 80
Leather goods.....	46, 438. 47
Hides and skins, manufactured.....	108, 902. 28
Boots and shoes.....	124, 773. 54
Woolen yarn.....	51, 409. 90
Cotton yarn.....	73, 329. 50
All wool cloth.....	570, 300. 44
Woolens, cotton mixed.....	80, 688. 65
Pure silks.....	28, 217. 95
Silks, cotton mixed.....	23, 256. 40
Cotton cloth.....	1, 449, 957. 69
Jute, hemp, and linen cloth.....	38, 698. 00
Laces and embroideries.....	155, 721. 42
Bonnets and other articles of lace.....	153, 725. 75
Hats, men's.....	308, 934. 49
Hats, women's.....	48, 083. 59
Linens.....	152, 567. 39
Ready-made clothing.....	384, 912. 94
Other manufactured articles.....	146, 737. 68
Furniture, wooden.....	128, 238. 60
Other articles of wood.....	62, 231. 50
Paper and cardboard.....	259, 670. 13
Printed books and music	99, 489. 38
Chinaware.....	50, 882. 39
Glassware.....	46, 747. 51
Sheet iron and steel.....	470, 134. 85
Manufactures of iron.....	2, 769, 647. 78
Manufactures of copper and bronze.....	72, 058. 21
Manufactures of zinc.....	58, 183. 93

Manufactured articles—Continued.

	Bolivianos.
Jewelry, gold and silver.....	58,438.19
Jewelry, imitation.....	54,072.58
Machinery and apparatus, electric.....	190,844.20
Machinery for the trades.....	246,485.10
Machinery, printing and weaving.....	73,047.77
Machinery, mining.....	422,225.66
Machinery, agricultural.....	31,039.04
Sewing machines.....	36,412.31
Other machinery and parts.....	306,164.38
Artisans' tools.....	70,894.46
Desk supplies.....	41,793.25
Railway coaches and cars.....	556,683.28
Musical instruments and accessories.....	43,008.07
Scientific instruments.....	39,291.64
Arms, ammunition, and explosives.....	1,082,173.10
Toys.....	20,493.08
All other manufactures.....	657,889.75
	12,614,928.12
Gold and silver, unmanufactured, gold and silver coin.....	
Total, first six months of 1912.....	17,510,491.37
Value in United States gold.....	\$6,829,091.63

Of the imports for the first six months of 1912, goods to the value of 17,231,971.17 bolivianos were dutiable. There were exempt from duty under general laws imports valued at 274,236.38 bolivianos, and under special laws and provisions imports valued at 4,283.82 bolivianos.

EXPORTS.

The following table shows the exports, by countries, for the years 1909, 1910, 1911, and 1912:

	1909	1910	1911	1912
United Kingdom.....	\$14,166,541	\$18,055,406	\$23,237,089	\$26,112,023
Germany.....	4,493,879	6,015,390	4,287,162	4,368,301
France.....	3,168,827	2,009,527	2,632,828	2,133,950
Belgium.....	719,597	1,486,735	1,466,348	1,380,063
Peru.....		3,853	8,685	372,183
Chile.....	536,999	270,996	160,175	331,347
Argentina.....	283,421	155,954	177,188	272,058
United States.....	29,459	62,438	244,345	152,976
Uruguay.....	56,784	56,917	9,756	22,652
Brazil.....	1,004,100	962,108	1,917	1,622
Panama.....				789
Other countries.....	408,535	1,633	663	
Total.....	24,868,142	29,080,957	32,226,156	35,147,964

Exports were classified, prior to 1912, under eight general heads, as follows:

	1910		1911	
	Weight.	Value.	Weight.	Value.
Mineral products.....	Metric tons. ¹	Bolivianos.	Metric tons. ¹	Bolivianos.
54,732	46,716,774.30	51,791	62,532,010.17	
Vegetable products.....	3,350	27,293,864.64	4,043	19,499,724.67
Animal products.....	323	277,391.64	382	298,021.65
Live animals.....		27,600.00		102,389.00
Mounted birds and insects.....		420.00		8,500.00
Nationalized products.....	110	117,402.78	487	101,814.15
Manufactured products.....	31	61,713.50	75	51,112.90
Miscellaneous.....	87	71,389.59	82	37,599.02
Total.....		74,566,556.45		82,631,171.56
Value in United States currency.....		\$29,080,957.00		\$32,226,156.00

¹ Metric ton = 2,204.6 pounds.

In 1912 the classification was under five headings, as follows:

	Weight.	Value.
I. Live animals.....	Metric tons. ¹	Bolivianos.
II. Food products and beverages.....	453	121,771.00
III. Raw or slightly wrought material.....	137	25,738.18
IV. Manufactured articles.....	60,163	83,537,024.83
V. Gold and silver, unmanufactured. Gold and silver coin.....	523	256,073.95
Total.....	135	6,182,379.14
Value in United States currency.....		90,122,987.10
		\$35,147,964.00

¹ Metric ton = 2,204.6 pounds.

The exports, by classes and principal countries of destination, for the year 1912 were as follows:

Class I. Live animals: Chile, 115,721 bolivianos; Peru, 6,050 bolivianos.

Class II. Food products and beverages: Chile, 12,844.28 bolivianos; Argentina, 11,260.15 bolivianos.

Class III. Raw or slightly wrought material. The exports under this classification included:

	Bolivianos.
Cattle hides.....	275,768.20
Rubber.....	15,508,721.12
Copper ore.....	3,389,175.81
Tin.....	60,238,196.60
Bismuth.....	2,150,042.02
All others.....	1,975,121.08
Total.....	83,537,024.83

Of this amount 65,189,641.48 bolivianos went to the United Kingdom, 8,089,713.71 to Germany, 5,471,910.25 to France, 3,538,622.78 to Belgium, 638,377.55 to Argentina, 392,157.89 to the United States, 151,589.32 to Chile, and 57,437.65 to Uruguay.

Class IV. Manufactured articles: Chile, 166,453.34 bolivianos; Peru, 38,950.37; Argentina, 37,936.48.

Class V. Gold and silver, unmanufactured. Gold and silver coin. Under this classification the exports were:

	Bolivianos.
Gold ore.....	144,275.00
Silver ore.....	4,308,329.14
Gold coin.....	1,297,375.00
Silver coin.....	432,400.00
Total.....	6,182,379.14

Of this amount 3,106,768.55 bolivianos went to Germany, 1,759,-193.29 to the United Kingdom, 903,250 to Peru, and 403,000 to Chile.

The following table shows the exports by articles for the last three years:

	1910		1911		1912	
	Weight.	Value.	Weight.	Value.	Weight.	Value.
	Metric tons. ¹	Bolivianos.	Metric tons. ¹	Bolivianos.	Metric tons. ¹	Bolivianos.
Tin ore.....	38,548	37,006,583.94	37,073	52,689,608.36	38,614	60,238,196.60
Rubber.....	3,007	26,825,230.96	3,646	18,921,192.04	4,080	15,508,721.12
Silver, uncoined.....		5,264,440.87		4,587,745.55	124	4,308,329.14
Copper ore.....	3,207	1,783,072.18	2,950	1,426,942.70	4,707	3,389,175.81
Bismuth.....	203	1,966,595.00	556	2,218,051.25	478	2,150,042.02
Gold coin.....		7,187.50				1,297,375.00
Coca.....		420,105.00		511,051.25	385	736,280.00
Wolfram.....	210	141,629.31	297	231,187.90	473	519,705.10
Silver coin.....		5,501.45		791,507.85	10	432,400.00
Zinc.....	11,797	439,008.90	9,798	372,490.00	8,961	329,995.00
Cattle hides.....	237	218,163.20	324	259,181.80	354	275,768.20
Lead ore.....	30	700.00	340	23,546.25	1,075	214,977.40
Gold ore.....				94,906.00		144,275.00
Quinine.....		24,577.72		40,473.55	52	46,967.94
Wool.....	19	16,127.00	17	12,264.60	17	14,480.95
Miscellaneous.....		446,713.42		501,026.86		516,288.82
Total.....		74,566,556.45		82,631,171.56		90,122,988.10

¹ Metric ton = 2,204.6 pounds.

The exports of tin ore, which represented, in 1912, 66.8 per cent of the total exports of the country, were distributed as follows:

	Metric tons.	Bolivianos.
United Kingdom.....	36,618.8	57,125,569.30
Germany.....	1,702.6	2,656,098.68
France.....	262.3	409,149.66
Belgium.....	22.1	34,469.09
United States.....	8.2	12,909.87
Total.....	38,614.0	60,238,196.60

Coca was exported in 1912 as follows:

	Kilos.	Bolivianos.
Argentina.....	295,153	590,240
Chile.....	95,926	137,660
Germany.....	4,209	7,790
United States.....	490	500
United Kingdom.....	50	100
Total.....	395,828	736,290

Of the total exportation of quinine (52,128 kilos), Germany took 36,952 kilos.



COMMERCE OF PANAMA FOR 1912 :: :: ::

THE total foreign trade of Panama for the calendar year 1912 was \$11,936,264.95, represented by imports to the value of \$9,871,617.40 and exports of \$2,064,647.55. The trade for the calendar year 1911 was \$12,760,413.15, of which sum \$9,896,987.85 represented imports and \$2,863,425.30 exports. There was, therefore, a decrease in the year 1912 over the preceding year of \$25,370.45 in imports and \$798,777.75 in exports, or a total decrease in foreign commerce of \$824,148.20.

IMPORTS.

The imports by countries for the years 1909, 1910, 1911, and 1912 were as follows:

	1909	1910	1911	1912
United States.....	\$4,996,628.63	\$5,652,653.46	\$5,122,950.01	\$5,413,305.15
United Kingdom.....	1,762,411.33	2,166,988.65	2,273,386.39	2,421,637.14
Germany.....	914,756.41	966,151.34	1,119,224.11	957,806.15
France.....	297,352.22	307,961.03	387,963.78	680,784.22
Spanish America.....	152,345.38	187,341.84	271,948.03	225,230.40
China and Japan.....	180,245.52	229,938.49	177,771.77	178,197.09
Spain.....	133,823.84	149,021.84	149,004.40	140,370.88
Belgium.....	108,319.94	101,435.62	150,297.19	117,875.33
Italy.....	210,426.37	198,466.49	182,934.60	117,781.02
Denmark.....		13,947.30	41,382.79	33,538.65
Austria-Hungary.....		3,127.20	9,185.65	11,360.80
Switzerland.....		79,939.34	10,959.13	6,316.90
Sweden.....				3,450.00
Total.....	8,756,307.64	10,056,993.50	9,896,987.85	9,871,617.40

Imports for the last four years grouped under 11 major classifications were as follows:

	1909	1910	1911	1912
Vegetable products.....	\$2,251,767.22	\$2,722,868.66	\$2,793,003.53	\$2,923,034.36
Textiles.....	1,712,828.82	1,847,182.21	1,630,969.87	1,666,354.72
Animal products.....	1,510,822.16	1,700,813.11	1,608,608.69	1,661,267.54
Mineral products.....	943,398.10	976,413.17	911,357.63	1,000,248.56
Liquors and mineral waters.....	649,690.76	747,109.66	748,237.90	473,447.38
Chemical and pharmaceutical products.....	384,243.73	440,931.18	438,065.81	419,800.46
Machinery and apparatus.....	228,174.63	256,197.87	344,034.88	200,920.58
Paper and manufactures of.....	125,487.82	159,256.30	113,353.05	129,464.10
Arms and explosives.....	45,192.61	53,951.98	44,594.49	70,898.80
Vehicles.....	56,252.37	42,510.20	40,834.79	44,881.60
Miscellaneous.....	848,449.52	1,109,759.10	1,163,827.21	1,280,399.30
Total.....	8,756,307.64	10,056,993.50	9,896,987.85	9,871,617.40

VEGETABLE PRODUCTS.

The imports by countries were:

	1911	1912
United States.....	\$1,409,008.38	\$1,627,857.79
United Kingdom.....	461,320.17	514,710.35
Germany.....	403,648.98	412,563.80
Spanish America.....	242,334.80	174,670.32
China and Japan.....	67,449.98	48,299.09
Italy.....	55,987.07	36,826.92
Spain.....	33,942.57	49,401.32
Belgium.....	29,302.65	20,936.91
France.....	27,781.81	37,522.46
Austria-Hungary.....	1,968.16	1,145.40
Denmark.....	168.96	.....
Total.....	2,793,003.53	2,923,934.36

Under vegetable products the principal articles imported in the year 1912 were:

Alimentary products.—Rice, \$486,408, of which \$353,987 was from Germany, \$72,663 from the United Kingdom, \$39,426 from the United States, and \$19,785 from China and Japan. Coffee, \$42,798, of which \$38,951 from Spanish America, \$2,193 from the United States, and \$1,187 from the United Kingdom. Potatoes, \$78,258, of which \$46,492 from the United States, and \$30,890 from the United Kingdom. Kidney beans, \$54,485, of which \$35,364 from the United States, \$8,981 from Spanish America, and \$2,561 from the United Kingdom. Onions, \$29,210, of which \$28,761 from the United States. Garlic, \$15,912, of which \$15,057 from the United States. Oats, \$26,040, of which \$25,974 from the United States. Fresh fruit, \$39,006, of which \$32,192 from the United States and \$6,344 from the United Kingdom. Preserved fruits, \$29,028, of which \$16,946 from the United Kingdom, \$6,151 from the United States, and \$1,599 from China and Japan. Indian corn, \$27,079, of which \$26,994 from the United States. Wheat flour, \$371,261, practically all from the United States. Olive oil, \$71,731, of which \$59,973 from the United States, \$7,902 from France, \$2,714 from Spain, and \$1,069 from Italy. Sugar, \$207,659, of which \$128,585 from the United States, \$48,579 from the United Kingdom, \$22,691 from Germany, and \$8,000 from Spanish America. Biscuits, \$53,192, of which \$35,353 from the United States, and \$15,291 from the United Kingdom. Confectionery, \$55,062, of which \$28,419 from the United Kingdom, and \$22,753 from the United States. Chocolate, \$36,079, of which \$20,101 from the United Kingdom, and \$14,485 from the United States. Macaroni and other pastes, \$20,234, of which \$15,314 from Italy, and \$4,333 from the United States. Corn meal, \$20,829, of which \$20,821 from the United States. Tea, \$44,912, of which \$40,616 from the United Kingdom and \$2,573 from China and Japan.

Industrial.—Lumber, \$208,694, of which \$208,688 from the United States. Furniture, \$161,755, of which \$131,294 from the United States, \$13,009 from Germany, \$10,582 from the United Kingdom. Building material other than lumber, \$28,671, of which \$24,110 from the United States and \$3,329 from Belgium. Linseed oil, \$29,711, of which \$26,011 from the United Kingdom and \$3,582 from the United States. Other industrial oils, \$42,713, of which \$31,278 from the United States and \$7,777 from the United Kingdom. Rope, \$15,503, of which \$14,445 from the United States. Trunks, \$49,691, of which \$41,092 from the United States and \$7,582 from the United Kingdom.

Miscellaneous.—Alfalfa and other fodder, \$26,815, of which \$23,899 from Spanish America and \$2,917 from the United States. Leaf tobacco, \$33,090, of which \$20,390 from the United States, \$6,328 from Spanish America and \$3,046 from the United Kingdom. Cigarettes, \$116,130, of which \$55,095 from Spanish America, \$47,176 from the United States, and \$13,853 from the United Kingdom. Manufactured tobacco, \$106,796, of which \$56,053 from the United Kingdom, \$22,567 from the United

States, \$11,606 from Spanish America, \$10,686 from Belgium and \$5,426 from Italy. Opium, \$73,355, of which \$49,228 from the United Kingdom, \$12,374 from Italy, and \$11,752 from China and Japan. Alpargartas (a kind of sandal), \$41,250, of which \$39,585 from Spain.

TEXTILES.

The imports by countries were:

	1911	1912
United Kingdom.....	\$802,621.64	\$848,782.81
United States.....	578,692.20	566,152.45
Germany.....	90,119.90	123,771.80
China and Japan.....	64,398.44	54,509.22
Spain.....	40,654.48	21,718.45
Italy.....	28,340.07	21,715.15
France.....	14,471.37	13,779.85
Spanish America.....		7,488.01
Belgium.....	2,524.95	5,026.03
Switzerland.....	9,146.82	3,410.35
Total.....	1,630,969.87	1,661,354.72

Under textiles the principal articles imported in the year 1912 were: Cotton cloth, \$842,798, of which \$488,955 from the United Kingdom, \$236,211 from the United States, \$93,384 from Germany, \$7,743 from Spain, and \$7,047 from Italy. All-wool cloth, \$179,509, of which \$162,189 from the United Kingdom, \$7,489 from Spanish America, \$5,503 from the United States, and \$3,140 from Germany. Pure linens, \$55,166, of which \$51,528 from the United Kingdom and \$1,847 from China and Japan. Pure silk, \$59,993, of which \$44,505 from China and Japan, \$6,640 from the United States, \$4,546 from the United Kingdom, and \$1,766 from Germany. Woolens, cotton mixed, \$35,464, of which \$21,246 from the United Kingdom and \$11,759 from Italy. Linens, cotton mixed, \$6,702, of which \$4,990 from the United Kingdom and \$1,478 from the United States. Silk, wool or cotton mixed, \$16,391, of which \$5,714 from the United Kingdom, \$5,637 from Spain, \$2,284 from the United States, and \$1,819 from Germany. Umbrellas and parasols, \$5,671, of which \$3,599 from the United Kingdom and \$1,132 from the United States. Ready-made clothing, \$403,999, of which \$300,470 from the United States, \$61,985 from the United Kingdom, \$20,433 from Germany, \$7,850 from France, \$6,230 from Spain, and \$5,779 from China and Japan. Cotton yarn and thread, \$39,503, of which \$35,563 from the United Kingdom, \$3,333 from the United States, and \$578 from Germany.

ANIMAL PRODUCTS.

The imports by countries were:

	1911	1912
United States.....	\$1,099,431.10	\$1,071,921.98
United Kingdom.....	313,451.09	409,061.68
Germany.....	121,610.55	48,671.20
Denmark.....	22,358.11	32,116.13
France.....	22,226.96	24,004.07
Italy.....	24,358.14	19,487.23
Belgium.....	15,614.77	18,094.40
Spain.....	18,880.22	17,998.39
China and Japan.....	21,928.10	15,849.44
Spanish America.....	8,740.65	2,643.00
Austria-Hungary.....		1,420.02
Total.....	1,668,608.69	1,661,267.54

Under animal products the principal imports for the year 1912 were: Live poultry, \$22,542, of which \$22,487 from the United States. Codfish, \$35,710, of which \$32,534 from the United States and \$2,212 from the United Kingdom. Corned beef, \$59,945, nearly all from the United States. Salt pork, \$62,479, practically all from the United States. Ham, \$49,727, of which \$45,368 from the United States and \$4,064 from the United Kingdom. Sardines, \$33,862, of which \$18,867 from Germany, \$4,189 from the United States, and \$3,588 from the United Kingdom. Canned meats and fish, \$204,882, of which \$132,595 from the United States, \$22,000 from the United Kingdom, \$19,554 from France, \$10,924 from Spain, \$8,893 from China and Japan, and \$2,327 from Germany. Eggs, \$40,153, of which \$40,145 from the United States. Condensed milk, \$330,399, of which \$279,514 from the United Kingdom, \$30,762 from the United States, \$11,137 from Italy, and \$9,275 from Germany. Lard, \$178,238, of which \$141,832 from the United States, \$25,475 from the United Kingdom, \$5,835 from Germany, and \$5,061 from Belgium. Butter, \$69,920, of which \$31,513 from Denmark, \$16,409 from the United States, \$14,095 from the United Kingdom, and \$5,334 from Germany. Oleomargarine, \$29,318, of which \$15,794 from the United States and \$12,318 from the United Kingdom. Cheese, \$54,201, of which \$39,390 from the United States, \$5,918 from Belgium, and \$2,336 from Germany. Boots and shoes, \$403,826, of which \$391,227 from the United States, \$6,383 from China and Japan, and \$3,825 from the United Kingdom. Candles, \$26,379, of which \$17,129 from the United Kingdom, \$7,242 from the United States, and \$1,991 from Belgium.

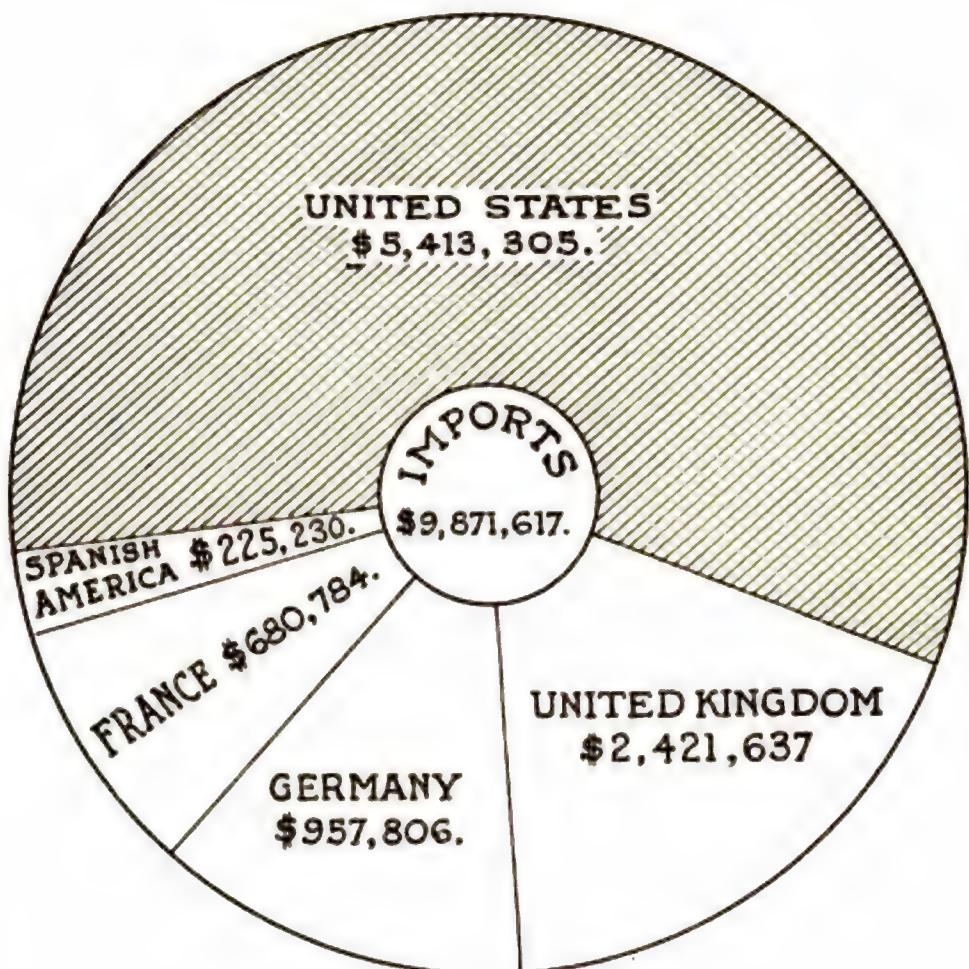
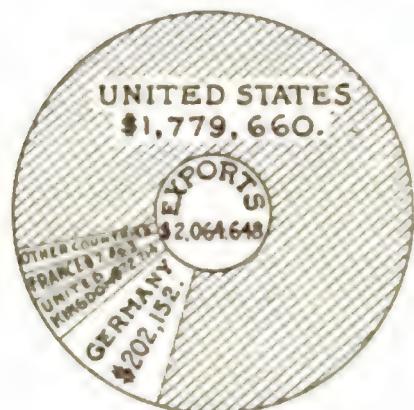
MINERAL PRODUCTS.

The imports by countries were:

	1911	1912
United States.....	\$569,125.85	\$764,912.63
United Kingdom.....	137,234.60	106,764.77
Germany.....	111,029.98	81,734.24
Belgium.....	56,687.00	13,730.15
Spanish America.....	2,256.25	10,432.45
France.....	10,114.01	8,768.98
Spain.....	4,523.24	5,307.86
Sweden.....		3,450.00
Italy.....	18,187.58	2,300.75
China and Japan.....	2,154.51	2,096.73
Denmark.....	44.52	690.00
Total.....	911,357.63	1,000,248.56

Principal articles under mineral products for the year 1912 were: Bar steel, \$16,757, which \$16,278 from the United States. Steel plates, \$1,421, all from the United States. Steel in other forms, \$24,046, of which \$22,406 from the United States. Fence wire, \$44,823, all from the United States. Iron plates, \$33,130, of which \$18,541 from the United States, and \$14,570 from the United Kingdom. Iron sheet roofing, \$46,315, of which \$42,389 from the United States, and \$3,926 from the United Kingdom. Iron tubing, \$47,406, of which \$46,952 from the United States, and \$454 from the United Kingdom. Structural iron, \$1,676, of which \$1,254 from the United States. Iron in other shapes, \$78,228, of which \$26,585 from the United Kingdom, \$24,725 from the United States, and \$24,499 from Germany. Railway material, \$140,672, of which \$139,483 from the United States. Street railway material, \$28,794, all from the United States. Hardware, \$81,304, of which \$70,379 from the United States and \$9,009 from the United Kingdom. Small tools, \$17,844, of which \$14,283 from the United States, and \$2,566 from the United Kingdom. Nails, \$16,974, of which \$9,375 from the United States, \$5,416 from Germany, and \$1,490 from the United Kingdom. Machetes, \$12,277, of which \$7,897 from the United States, \$3,449

PANAMA COMMERCE 1912. \$11,936,265.



from Germany, and \$815 from the United Kingdom. Wire netting, \$34,795, of which \$31,957 from the United States, \$1,407 from the United Kingdom, and \$481 from Germany. Bolts and nuts, \$8,388, of which \$4,690 from the United States, and \$3,450 from Sweden. Stoves, \$11,240, of which \$7,545 from the United States, \$2,491 from Germany, and \$1,158 from the United Kingdom. Petroleum, \$85,537, practically all from the United States. Coal, \$10,436, nearly all from Spanish America. Cement, \$54,145, of which \$46,404 from the United States, and \$6,438 from Belgium. Glassware, \$22,670, of which \$9,726 from Germany, \$9,044 from the United States, \$2,175 from the United Kingdom, and \$1,594 from Belgium. Bottles, empty, \$32,717, of which \$29,915 from the United States. Earthenware, \$23,102, of which \$9,615 from Germany, \$9,588 from the United Kingdom, and \$1,495 from the United States. Porcelain, \$19,537, of which \$13,882 from Germany, and \$4,730 from the United Kingdom. Sheet and plate glass, \$4,926, of which \$3,453 from the United States, \$783 from Belgium, and \$687 from the United Kingdom. Glass in other forms, \$8,239, of which \$5,049 from the United States, \$1,631 from Germany, and \$307 from the United Kingdom.

LIQUORS AND MINERAL WATERS.

The imports by countries were:

	1911	1912
United States.....	\$282,613.83	\$159,949.57
France.....	193,332.08	86,353.42
United Kingdom.....	114,317.02	77,074.40
Germany.....	52,555.96	40,207.29
Spain.....	41,386.53	35,354.21
Belgium.....	24,588.54	17,698.69
Italy.....	12,210.09	10,542.51
Austria-Hungary.....	7,197.49	8,795.38
China and Japan.....	1,074.76	785.41
Denmark.....	18,763.60	686.20
Spanish America.....	208.00	.....
Total.....	748,237.00	473,447.38

The principal articles under liquors and mineral waters for the year 1912 were: Mineral waters, \$26,581, of which \$7,979 from the United Kingdom, \$7,907 from Belgium, \$5,555 from the United States, \$2,668 from Germany, and \$2,174 from France. Beer, \$147,919, of which \$106,288 from the United States, \$19,942 from the United Kingdom, \$12,383 from Germany, and \$8,031 from Belgium. Cognac, \$2,213, of which \$2,105 from France and \$108 from Germany. Champagne, \$49,272, of which \$46,340 from France and \$2,281 from the United States. Liqueurs, \$5,280, of which \$2,908 from France, \$478 from the United Kingdom, and \$443 from Spain. Sparkling wine, other than champagne, \$3,344, of which \$1,642 from France, \$1,005 from Italy, and \$655 from Germany. Heavy wines, \$30,919, of which \$15,568 from the United Kingdom, \$9,743 from Germany, and \$3,197 from Spain. White wines, \$13,442, of which \$8,352 from Spain and \$4,224 from France. Red wines, \$89,522, of which \$48,905 from the United States, \$21,565 from Spain, and \$15,790 from France. Vermouth, \$22,745, of which \$8,432 from Austria-Hungary, \$6,121 from France, and \$5,763 from Italy. Whisky, \$46,348, of which \$28,355 from the United States and \$17,984 from the United Kingdom. Aguardiente, \$6,359, of which \$2,337 from the United States, \$1,712 from the United Kingdom, \$1,425 from Spain, and \$886 from France.

CHEMICAL AND PHARMACEUTICAL PRODUCTS.

The imports by countries were:

	1911	1912
United States.....	\$191,100.81	\$213,207.40
United Kingdom.....	90,425.76	96,620.11
Germany.....	117,286.25	61,926.60
France.....	25,979.32	38,816.18
Italy.....	8,077.11	4,170.88
China and Japan.....	2,427.82	2,108.71
Spain.....	1,700.78	1,088.47
Belgium.....	948.96	629.79
Denmark.....	59.00	46.32
Spanish America.....		
Total.....	438,065.81	419,800.46

The principal articles under chemical and pharmaceutical products for the year 1912 were: Shoe blacking, \$5,337, of which \$4,216 from the United States and \$1,146 from the United Kingdom. Matches, \$31,825, practically all from Germany. Paints, \$57,349, of which \$37,254 from the United Kingdom and \$19,501 from the United States. Salt, \$9,916, of which \$8,768 from the United States and \$1,147 from the United Kingdom. Medicinal wines, \$3,221, of which \$1,208 from France, \$858 from the United Kingdom, \$548 from the United States, and \$587 from Spain. Caustic soda, \$4,738, of which \$2,735 from the United States and \$2,004 from the United Kingdom. Miscellaneous chemical and pharmaceutical products, \$300,205, of which \$173,281 from the United States, \$52,796 from the United Kingdom, \$37,612 from France, and \$28,133 from Germany.

MACHINERY AND APPARATUS.

Imports by countries were:

	1911	1912
United States.....	\$257,586.01	\$153,084.99
United Kingdom.....	24,666.47	22,336.05
Germany.....	50,826.86	17,613.60
France.....	6,228.28	4,336.17
Belgium.....	1,208.65	1,741.88
Italy.....	2,762.98	934.33
Spain.....	611.20	839.81
China and Japan.....	144.43	33.75
Total.....	344,034.88	200,920.58

The principal articles under machinery and apparatus for the year 1912 were: Phonographs and accessories, \$11,431, of which \$10,205 from the United States and \$669 from Germany; musical instruments, \$12,549, of which \$9,021 from Germany, \$1,585 from Belgium, \$527 from the United States, and \$347 from the United Kingdom; lamps, \$16,510, of which \$12,730 from the United States, \$3,056 from Germany, and \$401 from the United Kingdom; sewing machines, \$73,705, of which \$72,851 from the United States and \$568 from the United Kingdom; typewriters, \$9,035, of which \$8,889 from the United States; scales, \$9,260, of which \$7,486 from the United Kingdom and \$1,744 from the United States; industrial machinery not specially classified, \$43,731, of which \$30,236 from the United States and \$10,479 from the United Kingdom; watches, \$2,513, of which \$752 from France, \$662 from the United States, \$572 from Germany, and \$525 from the United Kingdom; clocks, \$4,842, of which \$1,931 from the United States and \$569 from the United Kingdom; sugar-cane mills, \$3,604, all from the United States.

PAPER AND MANUFACTURES.

The imports by countries were:

	1911	1912
United States.....	\$61,126.44	\$57,895.57
Germany.....	33,956.72	40,248.40
United Kingdom.....	10,749.50	12,969.60
France.....	1,520.74	10,266.20
Belgium.....	956.93	4,318.12
Italy.....	1,653.63	1,705.00
Spain.....	1,803.30	1,453.81
China and Japan.....	466.39	522.21
Spanish America.....	504.05	85.10
Switzerland.....	615.35	.....
Total.....	113,353.05	129,464.10

The principal articles under paper and manufactures for the year 1912 were: Books and other prints, \$48,722, of which \$23,400 from the United States, \$8,873 from the United Kingdom, \$7,161 from Germany, and \$6,951 from France; writing paper, \$11,321, of which \$7,704 from the United States, \$1,005 from the United Kingdom, and \$1,619 from Germany; wrapping paper, \$26,325, of which \$19,635 from Germany, \$4,700 from the United States, and \$1,385 from the United Kingdom; print paper, \$5,466, of which \$4,817 from the United States and \$643 from Germany; paper, other kinds, \$11,981, of which \$4,426 from the United States, \$3,673 from Belgium, and \$3,071 from Germany.

ARMS AND EXPLOSIVES.

Imports by countries were:

	1911	1912
United States.....	\$26,290.35	\$50,554.87
Belgium.....	3,691.69	9,118.80
Spain.....	2,463.18	3,483.23
Germany.....	3,849.93	2,830.33
Spanish America.....	.....	1,250.00
United Kingdom.....	6,118.04	1,974.64
China and Japan.....	2,181.30	1,028.56
France.....	.....	658.37
Total.....	44,594.49	70,808.80

Under arms and explosives the principal articles for the year 1912 were: Cartridges, \$11,438, of which \$10,864 from the United States; shotguns, \$10,826, of which \$4,948 from Belgium, \$2,580 from the United States, \$1,039 from the United Kingdom, and \$873 from Germany; rifles, \$17,496, practically all from the United States; revolvers, \$8,536, of which \$4,063 from the United States, \$2,303 from Spain, and \$1,250 from Spanish America; fireworks, \$7,607, of which \$3,975 from Belgium, \$2,551 from the United States, and \$1,028 from China and Japan; gunpowder, \$8,624, of which \$8,535 from the United States.

VEHICLES.

Imports by countries were:

	1911	1912
United States.....	\$33,354.78	\$37,282.18
United Kingdom.....	4,034.25	5,493.95
France.....	1,224.68	1,170.39
Germany.....	51.12	635.08
Italy.....	2,135.36	300.00
Belgium.....	134.60	.....
Total.....	40,934.79	44,881.60

Under vehicles the imports for the year 1912 were: Automobiles and accessories, \$20,658, of which \$19,849 from the United States and \$809 from France; bicycles, \$9,114, of which \$4,979 from the United Kingdom, 2,832 from the United States, and \$618 from Germany; carts, wagons, and parts, \$9,182, practically all from the United States; carriages and parts, \$5,927, nearly all from the United States.

MISCELLANEOUS.

Imports by countries were:

	1911	1912
United States.....	\$654,530.26	\$674,435.42
United Kingdom.....	305,457.70	325,848.60
Germany.....	134,287.86	127,567.81
France.....	85,084.53	55,108.13
Spanish America.....	17,845.28	28,510.92
Belgium.....	14,638.45	26,580.56
Italy.....	20,222.57	18,738.26
China and Japan.....	15,546.04	16,927.84
Spain.....	2,960.90	3,725.33
Switzerland.....	1,196.96	2,906.55
Denmark.....	47.60	
Total.....	1,163,827.21	1,290,389.30

Under miscellaneous the principal articles for the year 1912 were: Pillows and bolsters, \$16,972, of which \$16,777 from the United States; gasoline, \$11,761, practically all from the United States; unclassified rubber manufactures, \$14,187, of which \$10,396 from the United States and \$3,495 from the United Kingdom. Common soap, \$164,377, of which \$101,643 from the United States and \$61,513 from the United Kingdom; toys, \$22,265, of which \$15,375 from Germany and \$4,812 from the United States; electrical material, \$112,122, of which \$107,139 from the United States and \$1,151 from the United Kingdom; printers' supplies, \$10,816, practically all from the United States; notions, \$164,658, of which \$110,065 from the United Kingdom, \$34,071 from the United States, \$9,948 from Germany, \$5,286 from France, and \$2,430 from China and Japan; plumbers' goods, \$28,632, of which \$26,097 from the United States; photographers' supplies, \$35,297, of which \$34,316 from the United States; stationers' supplies, \$19,334, of which \$12,936 from the United States, \$2,817 from France, \$1,992 from Germany, and \$1,642 from the United Kingdom; supplies for other industries, \$114,952, of which \$74,066 from the United States, \$22,033 from Belgium, \$7,558 from the United Kingdom, \$4,500 from Spanish America, and \$3,806 from Germany; curios, \$3,886, of which \$1,098 from France, \$922 from China and Japan, \$761 from Germany, and \$706 from the United Kingdom; perfumery, \$69,265, of which \$25,188 from the United States, \$21,827 from Germany, \$21,076 from France, and \$10,173 from the United Kingdom; small hardware, \$9,567, of which \$4,497 from Germany, \$3,186 from the United Kingdom, \$1,883 from the United States; felt hats, \$20,841, of which \$15,808 from the United States, \$2,809 from the United Kingdom, and \$1,244 from Italy; straw hats, \$80,428, of which \$27,683 from the United Kingdom, \$21,076 from the United States, \$21,013 from Spanish America, \$4,985 from Italy, and \$4,275 from Germany; hats other than felt or straw, \$10,871, of which \$6,972 from Italy, \$1,420 from the United Kingdom, and \$1,096 from the United States; sirups, \$9,785, of which \$8,018 from the United States, and \$1,538 from the United Kingdom; household utensils, \$22,585, of which \$14,457 from Germany, \$3,414 from the United Kingdom, \$2,733 from the United States, and \$1,000 from Spanish America; combs, \$9,710, of which \$4,011 from Germany, \$2,083 from the United States, \$1,963 from France, and \$1,414 from the United Kingdom.

TRADE BY PORTS.

The imports by ports of entry for the year 1912 were:

Ports.	Kilos.	Values.
Colon.....	85,337,264	\$8,407,674.38
Bocas del Toro.....	20,522,905	927,795.18
Balboa (Panama).....	10,003,419	545,517.95
Total.....	115,863,678	9,890,987.51

The total value of the imports by ports does not agree with the totals given in the statements of the import trade by countries and major classifications.

EXPORTS.

The exports by countries for the years 1909, 1910, 1911, and 1912 were as follows:

	1909	1910	1911	1912
United States.....	\$1,264,905.70	\$1,508,421.94	\$2,575,816.00	\$1,779,660.30
Germany.....	86,972.35	93,668.91	157,301.43	202,152.47
United Kingdom.....	142,174.36	165,273.30	125,169.87	72,714.28
France.....	3,770.00	1,966.00	4,683.00	7,803.00
Italy.....			455.00	
Other countries.....	4,652.30			2,257.50
Total.....	1,502,474.71	1,709,330.15	2,863,425.30	2,064,647.55

The exports for the last four years, grouped under three major classifications, were:

	1909	1910	1911	1912
Animal products.....	\$138,714.56	\$184,918.04	\$228,482.51	\$229,245.38
Mineral products.....	109,163.61	135,332.30	83,255.47	6,066.30
Vegetable products.....	1,250,127.84	1,449,079.81	2,550,449.80	1,829,335.87
Miscellaneous.....	4,468.70		1,237.52	
Total.....	1,502,474.71	1,709,330.15	2,863,425.30	2,064,647.55

ANIMAL PRODUCTS.

Exports under this head, by countries, were as follows:

	1911	1912
United States	\$132,232.08	\$117,145.15
Germany.....	82,542.53	96,166.68
United Kingdom.....	12,833.90	14,781.05
Costa Rica.....		1,077.50
France.....	874.00	75.00
Total.....	228,482.51	229,245.38

Under animal products for the year 1912 are included: Tortoise shell, \$39,185, of which \$28,007 went to Germany, \$6,866 to the United Kingdom, and \$4,237 to the United States; mother-of-pearl, \$83,224, of which \$66,240 went to Germany, \$9,685 to the United States, and \$7,300 to the United Kingdom; hides, \$83,800, of which \$82,347 went to the United States and \$1,262 to Germany; skins, \$19,020, practically all to the United States; live turtles, \$1,441, nearly all to the United States.

MINERAL PRODUCTS.

Exports under this head, by countries, were as follows:

	1911	1912
United Kingdom.....	\$81,933.47	\$6,655.30
United States.....	1,254.00	296.00
Germany.....	70.00	125.00
Total.....	83,255.47	6,066.30

The principal mineral products exported in the year 1912 were: Bar gold, \$5,175, all to the United Kingdom, and scrap copper, \$566, of which \$480 went to the United Kingdom.

VEGETABLE PRODUCTS.

Exports under this head, by countries, were as follows:

	1911	1912
United States.....	\$2,441,094.40	\$1,662,229.15
Germany.....	74,688.90	105,860.79
United Kingdom.....	30,402.50	52,277.93
France.....	3,809.00	7,788.00
Nicaragua.....		1,120.00
Italy.....	456.00	60.00
Total.....	2,550,449.80	1,829,335.87

Under vegetable products for the year 1912 are included cacao, \$17,660, of which \$11,003 to the United Kingdom, \$4,519 to Germany, and \$1,030 to the United States; rubber, \$107,164, of which \$67,163 to the United States, \$22,742 to Germany, and \$12,414 to the United Kingdom; coconuts, \$136,713, of which \$130,468 to the United States and \$5,195 to Germany; bananas, \$1,154,442, all to the United States; ipecac, \$10,059, of which \$5,162 to the United States, \$2,687 to the United Kingdom, and \$2,210 to Germany; medlar juice, \$22,283, of which \$14,288 to Germany and \$7,670 to the United States; ivory nuts, \$254,264, of which \$210,488 went to the United States and \$42,861 to Germany; sarsaparilla, \$18,441, of which \$7,975 to the United Kingdom, \$6,597 to Germany, and \$3,869 to the United States; mahogany, \$16,525, of which \$11,835 to the United Kingdom, \$1,750 to Germany, and \$1,080 to the United States; cocobolo wood, \$83,728, of which \$79,518 went to the United States and \$3,610 to the United Kingdom.

TRADE BY PORTS.

The exports, by ports of departure, for the year 1912 were:

Port.	Kilos.	Value.
Bocas del Toro.....	153,681,865	\$1,207,421.80
Colon.....	11,294,986	821,724.75
Porto Bello.....	1,240,862	34,381.00
Balboa.....	14,720	1,120.00
Total.....	166,232,433	2,064,647.55

ARGENTINE REPUBLIC

The UNIVERSITY OF TUCUMAN, established under a decree of July 2, 1912, began its educational work in 1914. The expenses of the university are borne by the Province of Tucuman.—The agricultural committee of the Federal Congress has recommended a bill authorizing the President of the Republic to borrow 15,000,000 gold pesos (\$14,475,000) to be loaned to the different provinces for the purpose of acquiring AGRICULTURAL LANDS to be sold on long time in small tracts to farmers.—The Northeastern Argentine RAILWAY has been granted an extension of time in which to complete its line from Concepcion, Uruguay, to Concordia.—The FAT CATTLE SHOW, held at Buenos Aires under the auspices of the Rural Society from November 9 to 12, 1913, distributed 100,000 pesos (\$42,460) in prizes.—In 1912 there were in the Argentine Republic 67,798 kilometers of TELEGRAPH lines, with wires aggregating a length of 207,316 kilometers, and with 2,581 telegraph offices, of which number 1,237 were State offices, 1,338 railway or private offices, and 6 semaphoric offices with telegraph service. The employees in the telegraph service in 1912 numbered 10,207, the domestic telegrams sent aggregated 8,897,954, of which 841,718 were franked messages. The foreign messages transmitted numbered 1,459,895. The gross receipts from telegrams were 28,315,265 franks, of which 8,200,920 franks (frank equals \$0.193 United States) were from the international service.—The official inauguration of the SUBTERRANEAN TRAMWAY in Buenos Aires took place on December 1, 1913.

During the first ten months of 1913 the exports from the Argentine Republic amounted to 391,984,147, gold pesos. (The gold peso is equal to \$0.965 United States currency.) The principal agricultural products exported were as follows: Corn, 4,266,443 tons; wheat, 2,740,161 tons; flax, 918,354 tons; oats, 843,587 tons.—The CENTRAL ARGENTINE RAILWAY increased its capital in 1913 by £300,000 (about \$1,500,000), making the total capital at the present time, £41,694,468 (\$208,472,340). The gross receipts during the fiscal year ended July 31, 1913, were £6,489,346 (\$32,446,730), the expenses were £3,718,935, and the net profits £2,770,411 (\$13,852,055).—At the Agricultural MOTOR CONTEST, recently held in the province of Buenos Aires, cash prices were awarded varying from 2,500 pesos (\$1,100) to 15,000 pesos (\$6,600) each. The first motor prize of 15,000 pesos (\$6,600) was awarded to the motor entitled "Oruga," second prizes to "Case" and "Big Four," and third prizes to "Hart Parr" and "Daimler."—A decree has been promulgated acknowl-

edging the adherence of the Argentine Republic to the postal MONEY-ORDER CONVENTION signed ad referendum by the Argentine delegates to the First Continental South American Postal Congress held in Montevideo in 1911.—The National Board of Education has approved the EDUCATIONAL BUDGET for 1914. This budget allots to the primary schools of the federal capital 20,358,122 pesos currency (paper peso equal to \$0.4246 U. S.); the national schools of the provinces, 7,387,000 pesos; the national schools of the territories, 3,280,680 pesos; the school for adults, 1,220,640; the normal schools, 9,346,632 pesos, and to the school for sickly and backward children, 1,220,640 pesos. The budget for the University of Buenos Aires for 1913 amounted to 4,000,160 pesos. This university has departments of law, philosophy, medicine, engineering, agriculture, veterinary surgery, commerce, and a university high school. An appropriation of 60,000 pesos is made for a dormitory at the college of agriculture which is located in the suburbs of Buenos Aires.



The AMERICAN INSTITUTE at La Paz has a teaching staff of 13 foreign professors, and the textbooks and methods used are North American. The institute has a kindergarten, a primary department, a graded school, and a commerical course. The headquarters of the school are at La Paz, but branches have been established in other cities of the Republic. The institute receives boarding and day pupils.—The German Transatlantic BANK, with a capital of 30,000,000 marks (about \$7,500,000), and its main office in Berlin, has branches at La Paz and Oruro, Bolivia. The Bolivian branches of this bank pay 2 per cent interest on current accounts, 3 per cent on three-months' time deposits, and 4 per cent on six months' time deposits.—In accordance with a contract made by the municipality of La Paz on July 4, 1913, with Vicente Fabiani for the establishment of a public SLAUGHTERHOUSE in the City of La Paz, all stock slaughtered in the municipality on and after January 1, 1914, must be killed in the municipal slaughterhouse, and only stock will be allowed to be butchered which has been found, after examination, to be healthy and in a proper state for consumption. The municipality receives 50 centavos for each head of cattle slaughtered, 10 centavos for each sheep, and 50 centavos for each hog. Slaughtering must be done by the employees of the slaughterhouse, after which the animals will be delivered to their owners for sale. The slaughterhouse is prohibited from buying and selling stock for its own account, and must confine its operations solely to the slaughtering of animals for food pur-

poses.—A law has been promulgated providing that in MINING disputes where lack of jurisdiction of the Executive Power is alleged, appeals will only be considered after a deposit of 50 bolivianos (\$20) has been made, said amount to be forfeited to the Government if the appeal is not sustained. The object of the law is to decrease litigation and prevent the making of unjust claims.—The exports from the city of New York to Bolivia in 1913 consisted of 11,206 pieces of merchandise weighing 1,040,552 kilos, valued at \$169,922.86. Of these shipments, goods to the value of \$142,314.20 entered the Republic through the ports of Mollendo, Peru, and Antofagasta and Arica, Chile. The goods shipped, in the order of their value, consisted of hardware, cotton fabrics, machinery, petroleum, provisions, and drugs. About \$1,250 of the merchandise referred to was imported free of duty.—The boundary commission charged with erecting BOUNDARY LANDMARKS between Bolivia and Peru have placed the monuments between Acre and Madre de Dios, erecting the same in cooperation with the Peruvian commission. The boundary line between Bolivia and Peru is now said to be definitely established.— Benjamin Mujica Fernandez, representing a New York shoe supply house, has recently made an investigation of the PALM WAX industry in the Bolivian Chaco, and reports that in the Chiquitos region and in the territory tributary to the ports of Pacheco and Suarez there exist large quantities of wax palms similar to those from which the celebrated Brazilian palm wax is extracted, and that these palms can be advantageously exploited commercially for the extraction of wax. An American engineer and a wax expert accompanied Mr. Fernandez on the trip through Brazil, Paraguay, and Bolivia and assisted him in his investigations and experiments. Palm wax is used extensively by shoemakers, and is much sought after in the industries for the manufacture of phonograph cylinders and for numerous other industrial purposes. The principal markets of the world for palm wax are Hamburg, Paris, New York, and Liverpool.



Compilations from the balance sheets of STOCK COMPANIES operating in Brazil show that the combined profits in 1912 of corporations issuing stock were, in round numbers, £5,000,000 (\$25,-000,000).—The committee on awards of the exhibits made at the EXPOSITION OF FINE ARTS, which was held in Rio de Janeiro during the latter part of 1913, gave the first prize to Guillermo Vergara on the painting entitled "Tarde en el Potrero" (Evening on the Ranch). Second prizes were awarded to Manuel Ortiz de Zarate

and Carlos Isamit; third prizes to Enrique Lobos, Jose Pridas Solares, and Ott Georgi, and honorable mention to Mrs. Luisa Fernandez and Ricardo Gilberti.—A recent STOCK CENSUS of the State of Santa Catharina shows 364,421 head of cattle, 11,563 horses, 35,188 mules, 351,000 hogs, 35,188 sheep, and 13,512 goats.—“A Noite,” a daily newspaper published in Rio de Janeiro, is authority for the statement that the Brazilian Government has negotiated in London a LOAN of £4,000,000 (\$20,000,000).—A committee, the object of which to promote industrial, COMMERCIAL, and agricultural relations between the Republics of France and Brazil, has been established in Rio de Janeiro. The Minister of France to Brazil is chairman of the committee.—The navy department of Brazil has adopted the LUMINOUS BUOY system for all the ports of the Republic.—The Liberdade STEAMSHIP CO. has extended its service to Brazilian ports.—The newspaper “A Noite” states that there are in Rio de Janeiro 400 automobiles in the service of the Government.—Drs. Oswaldo Cruz and Bruno Chaves have been selected to confer with delegates from Uruguay concerning the bases of a new SANITARY CONVENTION between Brazil and Uruguay. It is proposed that delegates from Argentina and Paraguay also participate in formulating these bases.—In October, 1913, IMMIGRANTS to the number of 7,125 entered the Republic of Brazil.—The Continental PRODUCTS CO. of Maine has been authorized to do business in Brazil with headquarters at Sao Paulo. Permission has also been given to the Continental Cigar Co. (Ltd.), of England, to engage in business in the Republic.—The Brazilian Lloyd STEAMSHIP CO. has established a direct service between Porto Alegre and Montevideo.—The army and NAVY MUSEUM at Rio de Janeiro has acquired two cannons which were mounted by the Portuguese at Prince Beira fort in 1776.—The Federal Congress has authorized the President of the Republic to approve the modifications of the BOUNDARY CONVENTION between Brazil and Uruguay, signed on May 7, 1913.—Justino Norbert has been granted a concession for the construction of a railway from Guaratingueta to Paratymirim.—The imports of LARD into the Republic of Brazil from 1904 to 1912, inclusive, expressed in kilos, were as follows: 1904, 2,559,250; 1905, 2,979,068; 1906, 2,424,185; 1907, 2,472,590; 1908, 1,870,000; 1909, 2,243,000; 1910, 2,081,716; 1911, 1,960,194, and in 1912, 1,908,859.—Mr. Algol Lange, author of *In the Amazon Jungle*, who is now connected with the Ministry of Agriculture, Industry, and Commerce of the Brazilian Government, states in a recent communication that he has completed three expeditions made for purposes of SCIENTIFIC RESEARCH. The first extended to the rapids of the Tocantins River; the second, which resulted in the discovery of about 2,000 specimens of prehistoric pottery, covered

the central part of the Marajo Island at the mouth of the Amazon River; the third resulted in the discovery of an unknown tribe of Indians at the headwaters of the Moju and Cairary Rivers, which presents some ethnologically interesting features.



CHILE

The Copacoya PETROLEUM fields in northern Chile are situated near the Bolivian frontier on the eastern slope of the valley formed by the Tatio Mountains, in latitude $22^{\circ} 10' 25''$, according to the plan on file in the surveyor's office. The valley is divided into a number of sections separated by small elevations or foothills of the neighboring mountains. In the central part of the valley and about 12 kilometers distant from the petroleum zone are 30 or more salt-water geysers and hot springs. The petroleum zone is not under exploitation and has not been fully explored, but experts report that there are unmistakable indications showing the existence of petroleum in the region referred to.—A plan has been submitted to the Government of Chile looking to the use of Pascua Island for the growing of sugar cane and the production of SUGAR. The island is 11 miles long by 5 or 6 miles in its widest part and contains an area of about 20,000 hectares, more than 5,000 of which, it is claimed, are suitable for sugar-cane cultivation. The approximate annual consumption of sugar in Chile is 75,000 tons, all of which is imported. It is estimated that to establish a sugar refinery on the island capable of producing from 300,000 to 350,000 quintals of sugar per annum would require an investment for plant and machinery of about \$1,750,000 gold. To this would have to be added the cost of acquiring and preparing the land, planting the cane, providing adequate transportation facilities, etc., of a sugar-cane plantation large enough to supply the needs of the factory. Experiments with sugar cane on the island shows it to be adapted to the growing of this crop. The chief difficulty, however, is the initial cost of establishing the industry. The land is fertile, and tobacco and cotton, which are cultivated on a small scale, flourish. The uplands are now utilized to some extent in the raising of sheep, and wool of strong fiber and superior quality is now being produced on the island.—A bill has been introduced into the Chilean Congress increasing the tax on urban and rural property, and imposing an annual tax of 5 per cent on the net profits of stock companies, banks and insurance companies being excepted.—The section which unites the LONGITUDINAL RAILWAY between La Serena and Vallenar has been completed, the junction having been made at kilometer 112.

This establishes direct rail communication between the north and south of Chile.—The Aguas Blancas RAILWAY has been authorized to construct a branch line from the Longitudinal Railway to Pampa Loreto.—A recent message of the President of the Republic to Congress requests authority to invest 1,545,000 pesos (\$339,900) in the repair, conservation, and construction of PUBLIC HIGHWAYS in different parts of the country.—The AGRICULTURAL CONGRESS, which met in Concepcion on October 26 last was one of the most important agricultural gatherings ever held in the Republic. Fine exhibits of stock and of agricultural machinery were made, and interesting subjects relating to Chilean agriculture were discussed.—The IRON deposits at La Serena are estimated to contain more than 185,758,000 tons of iron ore.—A plan has been submitted to the municipality of Santiago for the construction of a large municipal MARKET over the Mapocho River.—Sr. Don Eduardo Mujica, Minister of Chile in Washington, has advised the Monthly Bulletin that the date for the receipt of competitive plans and estimates for the construction of SHOPS FOR THE RAILWAYS of Chile, and for which first and second prizes of £4,000 and £2,000, respectively, have been offered, has been extended to May 1, 1914.



On December 6, 1913, the President of Colombia promulgated a new CUSTOMS TARIFF law passed the previous day. This tariff becomes effective in accordance with the provision of article 1 of law 24 of 1898, which prescribes that any change in the customs tariff which has for its object a decrease of import duties shall become operative 90 days after the law approving it is passed and the reduction shall be made by tenths during the following 10 months. If the change has for its object the raising of duties, then it shall become operative by thirds during the 3 months following the approval of the law.—A NEW VESSEL, thoroughly equipped, christened *Antonio Nariño*, intended exclusively for use in the canalization of the Lower Magdalena River, has been constructed out of native materials in the shipyards at Barranquilla.—The grading of the Pacific RAILWAY between Yumbo and Cali has been finished, and the line will soon be completed between these two points.—A contract has been made by the department of public works with Sr. Clímaco Mejía to establish a line of rapid HYDROPLANES on the Magdalena River between Barranquilla and Girardot, trips to be made either way in not less than four days. Each vessel shall

have accommodations for four passengers, a pilot, and a mechanic, and traffic is to be inaugurated within two years. The Government has subventioned the enterprise with \$15,000 with which to initiate its undertaking and \$80 per round trip after the business is established, the latter sum not to be paid for more than 10 trips per month. The tariff for passengers fixed by the Government must not exceed \$60 per passenger per trip.—Law 33 of 1913 establishes in Bogota a SUPERIOR BOARD OF HEALTH in charge of public and private hygiene. The board is composed of three physicians, a professor of natural science, and a bacteriologist. The National Academy of Medicine will act as consulting committee to the board.—In future, instructions in the NORMAL SCHOOLS of the Republic, in accordance with an executive decree of October 10, 1913, will cover a period of five years.—On December 8, 1913, Bello station of the Antioquia RAILWAY, 8 kilometers from the city of Medellin, was inaugurated.—The CENTENARY of the declaration of independence of the province of Tunja, now department of Boyacá, was celebrated on December 10 last.—Law 82 of 1913 provides that the President of the Republic, through the national intendant of Choco, shall establish an AGRICULTURAL COLONY in one of the bays of Cupiaca, Solano, or El Valle, on the Pacific coast.—In accordance with law 85 of 1913 the executive power is authorized to construct at public expense an AVENUE OF THE LIBERATOR between the city of Santamarta and the home of San Pedro Alejandrino.—The National Government has given the city of Mompos \$2,000, with which to complete the monument erected in that city to the liberator, Simon Bolivar.—La Veta Mining Co., whose property is in the gold-mining region to the north of the municipality of Ibagué, has fitted up a modern ASSAY OFFICE with equipment brought from the United States for the use of the company and for custom work.—The law of November 15, 1913, reserves to the State PETROLEUM and similar deposits existing on lands belonging to the Government. Until rules and regulations are issued covering the denunciation and adjudication of deposits of this nature only temporary concessions will be granted by the Government under contracts approved by Congress. This law repeals article 112 of the fiscal code.



On November 3, 1913, the President of Costa Rica, Sr. Don Ricardo Jimenez, delivered an interesting MESSAGE to Congress on the occasion of the opening of its special session, convened for the purpose of

considering and acting upon the following important questions:

1. The coastwise service between Port Coco, Puntarenas, and Golfo Dulce.
2. Passenger, mail, and freight transportation in the Gulf of Nicoya, the service now being carried on without a contract, the old contract having expired.
3. The cultivation of textile plants and the development of the textile industry, which the Executive states has not prospered in Costa Rica to the extent it should have done.
4. The construction of a railway in the Province of Guanacaste, between Coco and Liberia, Filadelfia, and Santa Cruz. Guanacaste has a large area of untilled agricultural land, which can not be properly cultivated and developed without improved transportation facilities, and the construction of the railway referred to would encourage the development of the agricultural industry in that part of the Republic.
5. The exploration and exploitation of petroleum deposits and deposits of other hydrocarbides which have remained undeveloped. The President says that 40 years ago the geologist, Dr. Gabb, discovered indications of petroleum in Talamanca, but up to the present time no serious investigation or practical use has been made of that discovery. The exploitation of the petroleum industry would require the investment of a large amount of capital, and if that industry is established in the Republic it would be a powerful factor in promoting the material welfare of the country.—A company with a capital of 18,000 colones (about \$9,000) has been organized at Cartago to engage in the THEATRICAL business. The construction of a new theater called the "Apolo" will be commenced in February next under the direction of Pablo Moreau.—A law has been enacted by the Congress of Costa Rica and duly promulgated by the President of the Republic imposing a tax of 5 colones (\$2.32) on each head of cattle imported into the country. The same law authorizes the executive to negotiate a loan of 1,000,000 colones (\$465,000), pledging the receipts from this tax as security for the payment of same, the proceeds of the loan to be invested exclusively in the construction of a RAILWAY between Coco and Liberia, Filadelfia and Santa Cruz.—Press reports state that plans have been made to undertake the CULTIVATION OF SUGAR CANE on a large scale in the Atlantic zone of the Republic. A company is to be organized with a capital of 300,000 colones (\$139,500) to be used in buying lands, and in clearing and planting to sugar cane. Experiments show that cane grown in that section of Costa Rica produces from 12 to 15 per cent of sugar, while in some other parts of the country 6 to 9 per cent is the average yield. Formerly sugar cane was cultivated on a small scale with great success on the Atlantic coast of the Republic, but this industry gradually gave way to banana growing. The revival of the industry in this part of the country is a notable sign of the great agricultural progress which Costa Rica has been undergoing during the last few years.—Steps

have been taken to found a CONSERVATORY OF MUSIC IN SAN JOSE. Dr. Gonzalo Fernandez and Aurelio Castro have been chosen a committee to further the undertaking.—The total revenues of the Republic of Costa Rica for the first nine months of 1913 aggregated 7,146,882.66 colones (\$3,323,300).



Recent statistics show that there are 14,777 acres of CITRUS FRUITS under cultivation in Cuba, grapefruit predominating. Of this acreage, 5,219 is in Camaguey and 4,276 in Pinar del Rio. The foreign colony at Ceballos cultivates 2,476 acres, and the one at Omaja 1,771 acres. Practically all of this development has occurred within the last 10 years. New groves are continually being set out, and the nurseries on the island are unable to supply the demand for budded trees. Cuban grapefruit is of an especially fine quality and flavor. The attitude of the Cuban Government toward the fruit industry is most favorable. The Cuban Senate recently approved a bill subsidizing a new railroad planned to be built in Pinar del Rio, and one of the conditions under which the subsidy could be obtained was a reduction of 50 per cent on the regular freight tariffs covering shipment of fruits.—A recent MESSAGE of President Menocal to the Cuban Congress recommends the amendment of the law of criminal procedure, the enactment of social-reform laws, and the establishment of a department of labor. The Executive states that the Government is negotiating parcel-post treaties with Costa Rica, England, Belgium, and Venezuela, and commercial treaties with the Netherlands and Chile. The message urges the reform of the judicial system, recommends an economic domestic parcel post, suggests an increase in the rural guard, and urges the authorization of a loan to liquidate the unpaid indebtedness of the nation. A revision of the tariff is recommended, as are measures which will tend to reduce the cost of living. The budget message, delivered to the Senate on November 18 last, calls for an appropriation of \$37,914,739.31 against an estimated revenue of \$41,828,580, which would leave a surplus to be spent in providing for appropriations of Congress under special laws of \$3,913,840.69.—The estimated SUGAR PRODUCTION for Cuba for 1913-14 is 2,479,600 tons. The Cuba Review says that an important innovation in the Cuban sugar trade was the sale recently made of some 42,000 bags centrifugals for shipment from Cuba to Japan at an understood price of 2.08 cents

per pound f. o. b. Cuba, with freight rate estimated at 0.33 cents per pound via Suez Canal. It may be the shipment will go through the Panama Canal if the canal is open for business at that time. The importance of the sale lies in the fact that it is the first time in history that Japan has imported sugar directly from Cuba, and the possibilities as to the reconstruction of the sugar business of the world by the use of the Panama Canal in the immediate future. — The Senate has approved a bill authorizing the President to expend \$40,000 in the construction of a HIGHWAY from Bayamo to Baire.—The Museum of Natural History of New York has recently obtained a collection of 10,000 specimens of CUBAN INSECTS.—The Santiago de Las Vegas agricultural EXPERIMENT STATION has been put in charge of J. T. Crawley, an American agronomist.—The Senate has voted appropriations covering \$364,000 for the construction of the Camaguey AQUE-DUCT, the rehabilitation of Victoria de las Tunas Park, and for the erection of a statue to Gertrudis Gómez de Avellaneda, the Cuban poetess.—Dr. Adolfo Lamar has been sent to the United States and Canada to study methods of making medical EXAMINATION OF IMMIGRANTS.—The Government has been authorized to expend \$35,000 for SCHOOL DESKS.—The Tropical Brewery of Habana in drilling for artesian water has encountered a flow of gas at a depth of 812 feet. From this it is deduced that the perforation was made over or in the vicinity of a deposit of petroleum. The gas in coming to the surface had to pass through about 500 feet of water contained in the well, and has an estimated pressure of over 150 pounds. Many denouncements have been made in the vicinity.—In accordance with a law promulgated and declared in force on December 20, 1913, the President of the Republic of Cuba was authorized to issue bonds for a LOAN OF \$10,000,000 in United States money, or at the rate of \$4.86 per pound sterling or the equivalent thereof in other foreign money. The details as to terms and conditions of the loan are left to the President, with the stipulation that the bonds are to bear interest at the most favorable rates obtainable, that they are to be amortized within such time as may be fixed and from a date agreed upon, and that the President is authorized to give such guaranties as may be legally required. Both principal and interest are exempt from all taxes now in force or that may hereafter be imposed by law in the Republic. The time for the call for bids expired January 15, 1914, when it was found on opening the bids that the J. P. Morgan Co. of New York were the most favorable bidders at 94 $\frac{1}{2}$. It appears that the award will probably be made to that banking concern.

DOMINICAN REPUBLIC

The department of foreign relations of the Government of the Dominican Republic, through its diplomatic and consular agents abroad, has been collecting data concerning the construction of HOUSES FOR WORKMEN, with the object in view of adopting this plan in the federal capital, and if successful there, to gradually extend it to other important cities and commercial centers of the country. It is argued that the building of sufficient houses of this class in the city of Santo Domingo would solve three important economic problems relating to habitations of workmen in that municipality, namely, the problem of an adequate supply of housing facilities, the problem of sanitation, and the problem of the systematic embellishment and beautification of the part of the city in which they are to be erected. The secretary of foreign relations, in a communication on this subject to the secretary of public works, recommends that the necessary funds be appropriated by Congress, say \$60,000 to \$80,000 to begin with, for the construction of a certain number of such houses, the purchase of land, and other expenses necessary for successfully carrying out the proposed plan, and explains that the State would probably find it a paying investment from a financial point of view, and at all events a reasonable interest would be earned on the capital used in the undertaking. The city of Habana, Cuba, is cited as an example of what can be accomplished by intelligent effort along these lines. It is set forth that the Cuban Congress authorized the President of the Republic to expend \$1,300,000 in the erection of 2,000 concrete houses for workmen, 1,000 of which were to be in Habana. Each of these houses was to cost \$650, including the lot, and each dwelling was to be provided with toilet, bath, and hydrant water in the kitchen. One thousand of these houses have been built in the Poglotti district of Habana, and are rented to workmen for \$6.25 per month, which amount goes into a fund to reimburse the Government for the amount spent in their construction. Each house has a sitting room, dining room, two bedrooms, a kitchen, a toilet and bath room, a small yard or patio, and a tile roof. The President of the Dominican Republic and his cabinet propose, according to press reports, to recommend the adoption by Congress of a similar plan applicable to the Dominican Republic, the first constructions to be made in the federal capital.—The committee appointed to award the prizes in the LITERARY CONTEST held in the city of Santo Domingo on the occasion of the celebration of the fifty-fourth anniversary of the restoration of the country, gave the first prize to the essay on "Constitutional reform,"

signed "Paz y Trabajo," and the second prize to the essay on the "Panama Canal," signed "Previsor."—The Dominican LEATHER & Shoe Manufacturing Co. of the city of Santo Domingo does its own tanning under the direction of a first-class American chemist and tanning expert, and is said to turn out a superior quality of leather for the manufacture of boots and shoes, and especially of patent leather footwear.—A company was recently formed in the federal capital to solicit a concession for the construction and operation of an electric TRAMWAY in the city of Santo Domingo and suburbs. The executive power has authorized said company to build the proposed tramway.—Independencia THEATER in the city of Santo Domingo was completed and opened to public service in November, 1913.



ECUADOR

A law has been enacted and duly promulgated by the President of the Republic authorizing the celebration of the FIRST CENTENARY OF THE POLITICAL INDEPENDENCE OF THE PROVINCE OF GUAYAQUIL to be inaugurated in the city of Guayaquil on October 9, 1920, by holding a national exposition of agriculture, industry, science, and arts, and October 9 of each year is made a public holiday throughout Ecuador. On October 9, 1820, at the time of the political emancipation of the Province of Guayaquil, that province was composed of territory afterwards called "Guayas," "Los Ríos," "Manabí," "El Oro," and a part of "Bolívar." The law provides a board consisting of the governor of the Province of Guayas, the chairman of the municipal council of Guayaquil, two agriculturists, two manufacturers appointed by the President of the Republic, two representatives of the press of Guayaquil, a delegate elected by the societies of workmen of Guayaquil, a delegate from each of the municipalities of the cantons which form the Province of Guayas, with the exception of Guayaquil; a delegate from each of the provinces which formed the Province of Guayas in 1820, a secretary elected by the board, and a treasurer appointed by the President of the Republic. The board is charged with the following duties: Erection of a sarcophagus in which to deposit the ashes of the heroes of the revolution and campaign of 1820 to 1822; the publication of the best work on the revolution of 1820 selected by a competitive contest under the direction of the board, and the erection in the principal plaza of Babahoyo of a commemorative monument of the first victory obtained by Guayaquil troops at a point called "Royal Road" or "Free

Road." The sources of revenue for preparing for and carrying on the celebration are as follows: Annual appropriations of the municipality of Guayaquil from 1914 to 1920, inclusive; one-half of 1 per cent of the municipal revenues of the Republic, with the exception of those of the municipality of Guayaquil, from 1916 to 1920, inclusive; all of the surcharges known as "derechos de sobordo" or port dues; collections by popular subscription, and the entrance proceeds of the exposition. The municipality of Guayaquil will furnish the land necessary for the exposition buildings and their annexes. The law became operative on January 1, 1914.—The Third International CONGRESS OF COLOMBIAN STUDENTS, which was to have met in Quito from the 9th to the 17th of December, 1913, has been postponed until May, 1914.—The President of the Republic has been authorized by Congress to colonize one or more of the Galapagos Islands with colonists three-fourths of whom shall be Ecuadorians. The law prohibits the executive from contracting with foreign nations or foreigners for colonizing these islands. The executive power is authorized to establish free ports in the Galapagos Islands, but foreign merchandise transported from said ports to ports of the mainland shall be subject to customs duties, wharfage, etc., the same as if it had never entered the Galapagos Islands. The government of the islands is placed exclusively in the hands of the President of the Republic.—The Province of Manabi contains large areas of land adapted to grazing. To encourage the cultivation of suitable forage for cattle and other stock in the dry regions of this province, each of the municipalities will include in its budget for 1914, 1,000 sucreas (\$487) with which to purchase, through consuls of Ecuador abroad, SPINELESS CACTUS (Burbank) to be distributed to farmers and plantation owners for cultivation in the Province of Manabi.—Under the proposed COMMERCIAL TREATY between Ecuador and Chile, Ecuador has the right to send to Chile, free of duty, sugar, coffee, cacao, dried and canned fruits, hats, and tobacco, and Chile may export to Ecuador, free of duty, Chilean wines not costing more than 5d. per liter, grape juice, dry forage, live stock, guano, nitrate, fresh, dried, and canned fruits, shellfish, construction timber, butter, and cheese.



On November 21, 1913, 26 new third-class POST OFFICES were opened to public service in the Republic of Guatemala.—According to press reports, RAILWAY COMMUNICATION was established

between Guatemala and Mexico in December last, the wooden bridge over the Suchiate River, which divides the two countries, having been replaced by an iron structure. The Government of Guatemala has established a customhouse on the banks of Suchiate River. Information from railway sources is to the effect that within a few months the port of La Union, Republic of Salvador, will be in rail connection with the Guatemala-Mexico Railway system.—The automobile road from San Felipe to Quezaltenango has been completed, and an AUTOMOBILE SERVICE established between these cities, Huehuetenango and San Marcos.—The Department of Fomento has contracted for the installation of ELECTRIC-LIGHT plants in the Military Academy and in the Asylum for the Insane at Guatemala City.—During the festivities of the ninety-second anniversary of the independence of Central America, celebrated in the city of Guatemala on September 14, 15, and 16, 1913, the beautiful MONUMENT erected to the memory of the patriot José Francisco Bartrundia was unveiled in the city of Guatemala in the presence of the President of the Republic. The monument was erected in accordance with a decree of April 27, 1911.—Don Joaquin Estrada C. has been appointed attaché to the LEGATION of Guatemala in Berlin.—The Government has approved the by-laws of the International Union of Workmen, and has recognized the artisan and MUTUAL AID SOCIETY of Guatemala as a juridic entity.—Sr. Cesar Sanchez Nuñez has been appointed CONSUL of Guatemala at Bogota.—The Government has contracted for the building of a SUSPENSION BRIDGE over the Samala River at the point where the highway from Retalhuleu to Quezaltenango crosses said river.—The Hamburg-Bremer FIRE INSURANCE CO. has been authorized to establish an agency in Guatemala.—The annual premium given by the United Fruit Co. to the student in the public schools of Guatemala who makes the most rapid progress in the study of the ENGLISH LANGUAGE, consisting of \$100 in American gold, a round-trip ticket to New Orleans over the United Fruit Co.'s line, and a month's residence in New Orleans and excursions into different parts of the United States under the direction of the United Fruit Co., the whole prize having an estimated value of about \$500, was awarded in 1913 to Rafael Carranza, the award having been made through the minister of public instruction of Guatemala.—Dr. F. Contreras B. has issued a third edition of his GRAMMAR of the Spanish language, the first and second editions having been exhausted.

The EXPOSITION OF MEDICINAL PLANTS, inaugurated in the city of Guatemala on October 27, 1913, in accordance with an executive decree of April 4 of the same year, closed its sessions on November 9 last. Exhibits were made at Hippodrome Hall not only with special reference to the medicinal plants of the nation and the

products derived therefrom, but particular attention was also given to displays of ornamental plants and to the floricultural products of the country. The President of the Republic, Licentiate Don Manuel Estrada Cabrera, heartily cooperated with the minister of public works in making the exposition a success.



Great interest is being displayed in Haiti in EDUCATIONAL MATTERS. The exercises attending the opening of the Elie Dubois Manual Training School at Port au Prince were held on December 1.—On November 30, 1913, the Teachers' Association of Port au Prince was addressed by Mr. Danache, who was a delegate of the Christian Union of Port au Prince to the congress organized by the National Committee of Geneva and held in Edinburgh, Scotland. Mr. Danache gave an interesting account of his trip from Port au Prince to Edinburgh, via New York and Paris. The December meeting of the association was addressed by Mr. D. Vaval, former chargé d'affaires at London and Habana, who spoke on Jean Finnot and his book "Race Prejudice." Mr. Lhérisson was again elected president of the association for the year 1913-14.—A meeting of the members of the committee appointed to revise the program of modern intermediary instruction was held in November to consider changes in the educational system of the country. The French system is followed, but the members of the committee urged the adoption of certain features of the American and German systems, especially in regard to manual training schools, high schools, and mechanical arts schools. Mr. Etienne Mathon, the secretary of State, who attended the meeting, announced that an agricultural school would soon be established and that he would request congress to authorize the organization of a commercial school.—The primary NORMAL SCHOOL for Girls was opened at Port au Prince on January 1. Thirty scholarships are provided for in the school budget.—A competition has been opened for the construction of two SCHOOL HOUSES, one at Morne à Tuf, and another at Belaire, at \$7,000 each.—The department of public instruction has issued a notice that in accordance with the decision of the board of cabinet ministers two FOREIGN SCHOLARSHIPS have been granted to the School of Applied Sciences. Only graduates of the school will be allowed to compete for these scholarships, for which examinations were held on November 24.—The department has also issued a notice that only those holding a certificate of classical intermediary studies will be admitted as students in the law and medical schools

of the country.—Under date of November 24, a notice was issued by the Department of Public Instruction informing the public that all books or objects to be used exclusively in the schools, such as copy books for bookkeeping, writing, drawing, text books, maps, etc., will be admitted free of duty.—The competition for the building of a girls' school at Port au Prince was awarded to Mr. Alphonse Denis, who was the only bidder.—The circular issued by the President in favor of agricultural instruction is already beginning to bear fruit and the Big Mills Co. of Haiti has promised the Government to give seeds to the presbyterian schools and plows to five of the schools situated at an altitude of not less than 400 meters for the purpose of encouraging agriculture in the country.—Following the visit which the commissioners of the Panama-Pacific Exposition made recently to Haiti on the gunboat *Birmingham* for the purpose of renewing the invitation of the United States Government to participate in the coming exposition to be held in San Francisco in 1915, the Haitian Government has cordially responded and appointed a committee intrusted with organizing its exhibit. The committee is composed of the following members: Dr. Leon Audain, Charles Gentil, St. Martin B. Canal, Frédéric Doret, Dr. Gaston Dalencour, Victor Gentil, Georges Régnier, Catinet Fouchard, and Jérôme Salmon.—The receipts of the CUSTOMS bureau of Port de Paix for the fiscal year 1912-13 amounted to 159,371.78 gourdes and \$223,011 American gold.—The WITHDRAWAL OF PAPER MONEY from circulation is to be begun in January. At first mutilated bills will be withdrawn and perhaps bills of five gourdes. Bills of one and two gourdes and nickel coins will not be exchanged until the arrival of the new coins and bank notes, which are expected in June. The Government has placed an order with the Mint at Paris for 3,000,000 gourdes in silver coin to replace the nickel coins and the Banque Nationale has placed at the disposal of the Secretary of Finance the 10,000,000 francs which are to be used for the withdrawal of the money now in circulation.



The Government of Honduras has authorized W. Warren, a merchant of Roatan, department of the islands of Bahia, to engage in the industry of FISHING in Honduran waters. The fish and shell-fish obtained therefrom are to be disposed of in northern ports of the Republic, the concessionaire being exempted from all taxes except the municipal license tax collected by each municipality for permission to make public sales.—The BANK of Commerce at

Tegucigalpa, which began operations on March 1, 1913, with a capital of \$90,900 silver, earned during the first six months of its existence a net profit of \$3,461.27 silver.—The President of the Republic has issued a decree providing for the establishment in the normal schools of the Republic of special LIBRARIES containing books of reference suited to the needs of the pupils of the normal schools. The department of public instruction of Honduras will donate to these schools a collection of books to be used as a nucleus in the formation of the libraries referred to.—The PORT OF LA CEIBA on the north coast of Honduras was established about 27 years ago. The principal commerce of the port at first was in connection with exports of cabinet woods, then there was a development of agriculture and stock raising in the immediate neighborhood, and later a railroad was constructed which now runs more than 80 miles into the interior of the country and has opened up a large section of virgin territory to easy communication and traffic. At the present time the port is a flourishing commercial center with well-paved streets, an electric-lighting plant, waterworks, etc. The exportation of bananas is the chief industry, and nearly all of this fruit is shipped to the United States, with which country La Ceiba has cable and wireless communication. Other important exports are coconuts, oranges, lemons, pineapples, rubber, sarsaparilla, hides, and cattle. The principal imports are made up of fabrics, boots and shoes, groceries, liquors, machinery, drugs, and ready-made clothing. The town is well provided with educational facilities, having two municipal colleges, one for boys and one for girls, public schools, and a number of private schools. La Ceiba also has a hospital, a market, a theater, and a modern municipal slaughterhouse.—An EMBROIDERY SCHOOL for girls has been founded by the departmental government at La Esperanza. This school is under the direction of an experienced lady teacher from Salvador, and is thoroughly equipped with sewing machines and other necessary accessories.—The NORMAL SCHOOL FOR BOYS at Tegucigalpa, under the direction of Prof. Pedro Nufio, is installed in a fine building especially constructed for the purpose under the administration of Gen. Bonilla. The school has well-equipped laboratories of chemistry and physics, a gymnasium, and a library of more than 800 volumes. Each year the graduates of this school take up teaching as a profession in the public schools of Honduras, and the beneficial influence of the school in educating the masses is being constantly extended throughout the Republic.—A committee has been appointed by the president of the Republic to recommend legislation concerning the condemnation of land for Government purposes, administrative proceedings, rural police, use of water and mountain lands, agrarian law, modifications of mining code and pharmacy laws, and the charges of lawyers and doctors for their professional services.



The first Mexican DENTAL CONGRESS will be held in the National Dental College in the city of Mexico from January 26 to 30, 1914, under the auspices of the department of public instruction and fine arts of the Federal Government. The Congress was organized by the Mexican National Dental Federation, Drs. Jose J. Rojo and David T. Bernard taking a prominent part in organizing and promoting the Congress. All dentists in the Republic are invited to participate in the proceedings of the Congress. The department of public instruction and fine arts has offered four prizes, consisting of two gold and two silver medals with their respective diplomas, for the best work submitted to the Congress and for the best exhibits made. An official banquet will be given and other entertainment provided for the attending delegates. Arrangements have been made with the railway companies to give special rates to delegates. Papers submitted by the delegates will be published, and 15 minutes will be given delegates in which to make oral recapitulations of papers submitted to the Congress. The proceedings of the Congress are to be published and furnished to the delegates.—The manuscript of 80 unedited chapters of NOVELS of Joaquin Fernandez de Lizardi, the celebrated Mexican writer and novelist, have been discovered in the Mexican Library in the city of Mexico. These manuscripts are to be published in the bulletin of the library, together with a biography of their famous author. A search is being made for other important manuscripts which it is thought may be among the files of the library.—Sr. Don Alberto L. Godoy has been appointed Mexican CONSUL at Washington, D. C., with offices at 510 Evans Building. The new consul entered upon his official duties on November 19 last.—An American company with a large capital has commenced work in the mineral zone at Zautla, Puebla. The company has denounced coal land, and gold, silver, and copper properties. A smelting plant is planned to be erected which will give employment to thousands of laborers in the districts of Zautla, San Juan de los Llanos and vicinity.—The Mexican Development Co. of Peoria, Ill., which is working the Quelitlan copper property in the district of Autlan about 18 miles from the Pacific port of Chamela, has contracted for the sinking of a double compartment shaft an additional 100 feet. Recently three large ore shoots, rich in copper and silver ores, have been encountered. The ores carry zinc and the company intends to erect a plant for zinc separation in connection with a smelter of 100 tons capacity per day. Iron and

lime exist in the neighborhood and much development work has been planned.—Sr. Don Juan Carrillo, the celebrated Mexican artist and director of the conservatory of music in the city of Mexico, proposes to teach MUSIC by the open-air method, and has formulated a plan looking to the utilization of a part of the picturesque woods of Chepultepec Park for that purpose.—The minister of public instruction and fine arts has appointed Lic. Emilio Rabasa dean of the NATIONAL UNIVERSITY of Mexico.—A Belgian syndicate proposes to invest 250,000,000 pesos in the construction of 5,000 kilometers of railway in the Republic of Mexico.—The Statistical and GEOGRAPHIC SOCIETY of Mexico, with a library and museum in the city of Mexico, has been in existence over 80 years, having been founded on April 28, 1833, under the presidency of Antonio Lopez de Santa Ana.



NICARAGUA

Press reports show that the FINANCIAL CONDITION of Nicaragua during the latter part of 1913 was as follows: Cordobas in circulation, \$2,320,000; special reserve deposit in New York, \$829,100; intrinsic value of cordoba coinage, \$103,590; amount of reserve fund and value of coinage, \$932,690, or 40.04 per cent of the circulation. Pesos in circulation at the beginning of the monetary conversion, 48,757,603.95; amount burned since that time, 37,551,554; amount deposited in bank to be restamped, 951,244.45; amount restamped, 7,760; total, 39,278,798, which leaves the sum of 9,478,805.45 pesos in circulation. No allowance is made for bills that have been destroyed or lost during circulation.—The OFFICIALS OF THE MUNICIPALITY OF MANAGUA whose term of office began on January 1, 1914, are as follows: Federico Cabrera, mayor; Humberto Pasos Diaz, vice mayor; Victor M. Torrez, Gilberto Lacayo, Ramon Zelaya, and Ramirez Arguello, councilmen; Francisco B. Diaz, city attorney.—J. A. Witaker has been appointed manager of the National BANK of Managua.—The first anniversary of the inauguration of PRESIDENT Diaz was celebrated on January 1st last with a military parade.—On January 1, 1914, the following city officers were inaugurated at Bluefields: Dr. W. K. Ingram, mayor; Dr. Alfred E. Kruse and Lester V. Coe, councilmen; Segundo Calonje, city attorney; Julio C. Mena, local judge, and Felix S. Brown, substitute judge.—St. Mark's Protestant Episcopal Church was dedicated at Bluefields on December 7, 1913. The cost of the building was

\$7,000.—The election of members of the SENATE, which was held on December 7, 1913, resulted in the choosing of 15 Conservatives and 6 Liberals. Seven of the new senators were members of the House of Delegates at the time of their election, and a special election will have to be called to fill the vacancies.—The postmaster general has issued an order providing that from the 1st of January, 1914, 60 cents for each three months will be collected for the use of post-office MAIL BOXES, payable in advance.—Miguel Cardenas has been elected SPEAKER of the House of Delegates, Maximo H. Zepeda, vice speaker; Mariano Zelaya, first secretary; Ramon Enriquez, second secretary; Virgilio Gurdian, vice secretary, and Saturino Arana, second vice secretary. The officers of the Senate are: Federico Solorzano, speaker; Manuel J. Cordero, vice speaker; Hernan Harquin, first secretary; Moises Baltodano, second secretary, and Joaquin Solorzano, first vice secretary.—Considerable prospecting is going on in the Wawa district of Nicaragua, and foreign miners seem to be much impressed with the low-grade ledges which were abandoned because of crude reducing methods. A number of blanket veins have been located in the MINING district referred to.—COTTON growing is being engaged in at Yulu and Maniwatla with excellent results.—The President of Nicaragua has appointed Sr. Ernesto Solórzano D. CONSUL GENERAL of Nicaragua in the city of New York. The office of the consulate general is at 66 Beaver Street.



Camilo Castillo has petitioned the Government of Panama for a CABLE AND TELEGRAPH concession. According to the plan submitted to the Government of Panama, if the concession is granted the country will have an additional cable service with the United States and a reduction of 50 per cent in present rates. Press reports state that Mr. Castillo has secured the cooperation of the Government of Peru and has authority to make cable connections with that country, and now desires to make similar arrangements with other interested nations. The petitioner claims that the new company can furnish cable service with South America, the United States, and Europe at one-half the present rates and asks a guaranty of 6 per cent on the money invested in the enterprise. A concession is also requested for operating the telegraph lines of the Republic, and modifications are proposed that, it is said, will enable a much faster transmission

service than that at present in force. Mr. Castillo was formerly with the Central & South American Telegraph Co. in Peru, and was instrumental in reducing the charges on messages sent to that country.—
BAYANO RIVER which empties into the Bay of Panama and the outlet of which is about 40 miles to the east of the city of Panama, is navigable to power craft for a distance of some 20 miles. Vessels of deep draft can cross the bar and enter the river at high tide and find a safe and commodious anchorage in the mouth of the stream. Chepillo Island is situated at the mouth of the river, and high ground is found on both sides of its entrance. The surrounding country is exceedingly fertile, and although at present quite isolated from the rest of the Republic, it offers many natural advantages for the establishment of an important commercial port with a large section of rich, undeveloped country tributary to it.—Work on the DOCK at Cristobal is being rushed to completion by the Central American Construction Co. in order to meet the requirements of the heavy tourist traffic. The railway track will run alongside the dock thereby enabling passengers to step off the steamer into the train and save delay in making excursion trips. The dock is fireproof and is one of the finest structures of its kind in the world.—In accordance with an executive decree of November 13, 1913, a tax of \$0.15 per liter will be collected on AGUARDIENTE manufactured in the Republic on and after February 13, 1914.—The Perla Barbarossa Tobacco Co. (Ltd.), of Colon, has been granted a return of duties on IMPORTED TOBACCO used in the manufacture of cigarettes for sale in the Canal Zone, the return to be made on the basis of 5 kilos of imported tobacco to each 1,000 cigarettes.—Titles have been issued to the Central American Land & Improvement Co. covering six alluvion GOLD MINES situated in the province of Colon.—
B. F. Ellinger has acquired 1,000 hectares of Government lands in the Province of Chiriqui to be used in establishing an agricultural colony.—The Goverment has ordered 5,000 copies of the fourth edition of the GEOGRAPHY OF PANAMA by Dr. Ramon M. Valdes, for the department of public instruction, at the rate of \$0.90 per copy.—Jose C. de Obaldia has been appointed CONSUL of Panama at Hongkong, Edmundo Couto consul adhonorem at Bilbao, Spain, and James Moorkens consul adhonorem at Los Angeles, Cal.—The Isthmian Telephone Co. has contracted with the Government of Panama to furnish telephone service in the city of Panama at the rate of \$1.90 a month per telephone. The charges for service between Panama or Colon and points in the Canal Zone will be 5 cents per call of three minutes or fraction thereof, and 10 cents per call of three minutes or fraction thereof between Panama and Colon.



PARAGUAY

On October 3, 1913, the first THROUGH TRAIN FROM BUENOS AIRES TO ASUNCION left the city of Buenos Aires on a 50-hour schedule. The distance between the capital of the Argentine Republic and the capital of Paraguay over the route referred to is 1,518 kilometers. Of this distance 101 kilometers is over the Central Railway of Buenos Aires, 443 kilometers over the Entre Rios Central Railway, 598 kilometers over the Northeastern Argentine Railway, and 376 kilometers over the Central Paraguay Railway. Great credit is due these railways in connecting their lines so as to make a direct rail and ferryboat service possible between Buenos Aires and Asuncion, and the Paraguay Central Railway showed special foresight and business ability in changing the gauge of its line from 5 feet 6 inches to 4 feet 8½ inches, thereby completing a standard-gauge trackage from Asuncion to Buenos Aires and rendering possible a through-train service. A weekly train between the two cities was maintained until December 1, 1913, when the increase in traffic justified the establishment of a semiweekly service. An effort is being made to still further reduce the length of schedule time between the two places. Analyzing the service, it is seen that the train which left Buenos Aires on Sunday, October 3, 1913, at 3 p. m., reached Asuncion on Tuesday at 5 p. m. These trains are composed of sleeping cars, a dining car, first and second class day coaches, and a baggage car. On leaving Buenos Aires the train follows the River Plate in a slightly northwestern direction to Zárate, at which point it is run onto a ferryboat and conveyed across the Rio de la Plata to Ibicuy. A northerly direction is then followed, via Carbo, Basavilabaso, San Salvador, Concordia, Montecaseros, Los Libres, and Santo Tome, to Posadas, at which place the train is again run onto a ferryboat and transported across the Upper Paraná River to Pacuqua near Villa Encarnacion, Paraguay, from which point it proceeds, via Villarica, without further interruption, to Asuncion. Among the principal points of interest along the line may be specially mentioned the deep-water port of the Entre Ríos Railway at Ibicuy, where there is a depth of 25 feet alongside the wharves at low water, and where the most up-to-date mechanical appliances for loading and unloading vessels alongside the wharves are made use of. After leaving Ibicuy the railway traverses the beautiful Parancito Valley, through which a new roadbed is being built at a higher level alongside the one on which trains now run. This new roadbed and track will be well ballasted, and will be provided with

steel bridges, stone culverts, and numerous drains to carry off the surplus water in time of flood. The new roadbed is expected to be completed and ready for use early in 1914. A fine country is traversed in the neighborhood of Concordia, on the Uruguay River, the roadbed following the river through a rich agricultural and stock raising section to Santo Tome. At Los Libres passengers for Brazilian points leave the train and cross the Upper Uruguay River to Uruguayana, Brazil, where direct rail communication is made for Sao Paulo, Rio de Janeiro, Rio Grande do Sul, and other Brazilian points. The through train from Asuncion for Buenos Aires leaves Asuncion at 8 a. m. on Wednesdays and Saturdays and arrives at Buenos Aires at 9.30 a. m. on Fridays and Mondays. Through trains leave Buenos Aires for Asuncion on Sundays and Thursdays at 3 p. m. and arrive at Asuncion on Tuesdays and Saturdays at 4.30 p. m.



The MUSEUM OF NATIONAL HISTORY of the Republic of Peru in Lima has been reorganized in accordance with an Executive decree of November 4, 1913, and the section of archeology and anthropology has been made a separate department.—The general REVENUES of the Government of Peru collected from January 1 to September 30, 1913, amounted to £2,455,030.—A law has been promulgated providing for the levying of a small tax for the purpose of securing funds with which to carry on the work of the SANITATION of the cities of Pisco, Chincha, and Ica. The plans include the furnishing of an adequate supply of potable water to the cities in question, the construction of sewers, and other necessary improvements.—The work of the mixed DEMARCTION COMMITTEE of Peru and Brazil has suspended active labors in the field until May 15, 1914, at which time the commission will meet in Belem do Para. From that point it will start on a visit to the Shambucayo, Yaco, Curaya, and Acre Rivers.—The National EXPOSITION OF HYGIENE at Lima closed its sessions on December 31 last.—The report of G. W. Hartmann, a civil engineer, to the departmental board of Junin, shows that the rail, wagon, and fluvial ROUTE FROM CARHUAMAYO TO PORT AMBATO, the latter place to be christened "Port Billinghurst," is 2,337 kilometers. It is proposed that the railway to the eastern part of Peru accept part of this route in building its line. The different sections of the survey referred to are as follows: Callao to Carhuamayo by rail, 306 kilometers; Carhuamayo to Puerto Mairo overland, 193 kilometers; Puerto Mairo to Puerto Ambato in canoe, 68 kilometers, and Puerto Ambato to Iquitos in boats of 3 feet

draft, 1,770 kilometers. A shorter route, known as the Huachi-Ucayli, has been proposed, the total distance of which is 1,606 kilometers, made up of the following sections: Callao to Huacho by sea or rail, 115 kilometers; Huacho to Sayan by rail with a maximum grade of 2.5 per cent, 55 kilometers; Sayan to Oyon (Bryce-Catellin concession), 92 kilometers; Oyon to Huanuco with a maximum gradient of 3 per cent, 140 kilometers; Huanuco to Tomichico with a maximum gradient of 2 per cent, 299 kilometers, and Tomichico to Iquitos in boats of a draft of not less than 5 feet, 905 kilometers. The difference in distance in favor of the latter route is, therefore, 731 kilometers.—Congress has authorized the President of the Republic to contract for the construction of a RAILWAY from Cuzco to a point on the Urubamba River. The Government has contracted with David O. Reed, through the department of public works in Lima, to build the section of this railway from Cuzco to Santa Ana.—A social organization known as the PERUVIAN FRATERNITY, with headquarters at 1710 Spring Garden Street, has been organized in Philadelphia, Pa., by a group of Peruvian students and professional men resident in that city. Dr. Miguel R. Denegri is president of the society, and Sr. Carlos La Puente, secretary.—A HISTORICAL INSTITUTE has been organized at Cuzco for the purpose of studying the history of Peru, awakening interest in the past history of the country, conserving the remains of ancient civilization, studying the folklore of the Department of Cuzco, and the making of archeologic investigations.—The departmental board of Lima has been authorized by Congress to negotiate a loan of £15,000, the proceeds of which are to be used in completing the HIGHWAY from Lima to Canta.—Congress has ceded a tract of land to the municipality of Callao to be used in the construction of DWELLINGS for workmen.—A 20-ton block of granite has been erected over the tomb of HENRY MEIGGS in Lima.—The National Congress has appropriated £1,000 to be used in the erection of a MONUMENT at Sicuani in honor of Brig. Gen. Mateo Garcia Pumacahua, a hero of the revolution of 1814.



An executive decree of November 7, 1913, exempts BANKS in the Republic of Salvador from the payment of their obligations in coin for a period of six months, providing they comply with the provisions of the decree and guarantee to the satisfaction of the Government the amount of their obligations at present outstanding. Banks which do not comply with the provisions referred to are obligated to increase their guaranty funds 50 per cent more than the

amount usually required. Banks complying with the provisions of the decree exempting them from the payment of their obligations in coin are required to import 500,000 pesos in silver coin and are prohibited from making a new issue of bank bills within a period of six months. The Bank of Salvador has decided to increase its cash funds by not less than 800,000 silver pesos, and the Occidental Bank is also to have the same amount coined for public use. The latter bank has arranged, through the Consul of Salvador in New York, to have 500,000 pesos in coin minted in Philadelphia and to increase that amount if necessary. Press reports state that the Government will bring into Salvador not less than 30,000 pesos in one and three-cent pieces in order to meet the demand for small change in retail transactions in the markets of the Republic.—The Government of Salvador has received proposals from Frederick F. Searing, Victor Keilhauer, and Ernesto Cabrera for the construction of a RAILWAY from the city of San Salvador to Port Libertad. The full Spanish text of the last two proposals mentioned is published in the official newspaper of Salvador under date of October 13, 1913.—The Society of Commercial Employees of Salvador has established a SAVINGS BANK in the city of San Salvador.—Sr. Jose Velazquez, a citizen of Salvador residing in Philadelphia, has organized a society for the mutual PROTECTION OF LATIN AMERICANS who arrive in Philadelphia. Sr. Velazquez has been chosen president of the organization.—The revenue produced in July, August, and September, 1913, from the sale of stamped paper and REVENUE STAMPS amounted to 98,524.23 pesos.—A company has been formed consisting of Fabio G. Cabezas, an experienced mining engineer, and a number of local capitalists of the town of Suchitoto for the purpose of exploring the Hedionda cave and prospecting for gold, silver, and copper ORES said to exist in the vicinity. An ancient manuscript has been found which gives an account of a great treasure of gold bullion, gold and silver coins, and other valuables supposed to be hidden in the Hedionda cave, the total treasure being estimated at \$60,000,000. It is the intention of the company to look for this supposed treasure, and also to thoroughly prospect the adjacent districts in search of gold, silver, and copper mines.—Since November, 1913, a THROUGH TRAIN SERVICE has been established between the city of San Salvador and Sonsonate, the bridge at Ateos having been completed.—A resolution of the executive power provides that, on and after January 1, 1914, consuls of Salvador shall furnish official CONSULAR INVOICE BLANKS to merchants and others entitled to same at the rate of 20 cents, gold, per set.—The construction of the new NACIONAL THEATER in the city of San Salvador is rapidly progressing under the direction of French architects. The old National Theater was destroyed by fire a few years ago.



URUGUAY

The municipal board of the city of Montevideo has had submitted to it by the board of public instruction of the federal capital rules and regulations forbidding the entrance of children of either sex under 14 years of age into theaters, CINEMATOGRAPHS, and similar public places where theatrical representations or biograph exhibitions are given. The managers of theaters and biograph halls may, however, under these proposed rules and regulations, organize special performances for children, subject to the approval of a special censorship committee, provided programs of an instructive character are presented. These special performances are exempt from license taxes, and may be given at any time, but shall not terminate later than 10 p. m. The proposed rules forbid children under 4 years of age to attend public performances of any description. Children under 14 are prohibited from attending public places where dances are given for adults, and juvenile balls may only be given by special permission of the committee on censorship, which committee is also empowered to supervise dance programs.—For the purpose of encouraging and promoting the development of AVICULTURE among the women and girls of the Republic, the National Stock and Agricultural Society of Uruguay has offered three prizes to women engaged in avicultural pursuits in the department of Montevideo for (1) the best managed and equipped avicultural plant, (2) the largest egg production, and (3) the finest specimens of thoroughbred fowls.—Participation in these contests closed on December 31, 1913. The jury is given until March 31, 1914, to make its decisions, and the prizes are to be awarded on April 19, 1914.—The municipal MUSEUM of Montevideo, under the able management of Sr. Alberto Gomez Ruano, has moved into its new home in the federal capital. Important additions to the interesting collection of objects and relics already on hand have been made to the museum and are now accessible to the public. Sr Ruano is also director of the celebrated Teachers' Museum of Montevideo.—Investigations made by the Industrial and Chemical Institute of Montevideo on Uruguayan sands for the manufacture of GLASS show that the qualities of the samples submitted are not suitable for the manufacture of fine glass, but are well adapted to the manufacture of lower grades of glass.—The ESPERANTO societies of Montevideo offer free instruction in that language to all who desire to study it.—Since the middle of November, 1913, the Santiago Lambruschini Navigation Co., which has a line of vessels plying between Montevideo and Buenos Aires, has established the following

passenger rates between the two places: One way, first class, 5 pesos; round trip, 8 pesos; one way, second class, 3.70 pesos; round trip, 6.50 pesos; one way, deck passage, 1.25 pesos; round trip, 2.25 pesos. (The Uruguayan peso is equal to \$1.034 United States.— Sr. Vicente Puig has been commissioned under a recent decree to study abroad practical methods and procedure for teaching and encouraging the study of the FINE ARTS in the public schools.— The NATIONAL CATTLE EXPOSITION held in December at Montevideo was one of the most successful ever held in the country and aroused the greatest enthusiasm. The general appearance of the exposition grounds was very picturesque, and the arrangements, buildings, and stalls for exhibiting the animals were modern in every detail. A large grand stand was erected, where the jury and public watched several thousand specimens paraded in the ring. Seven hundred prizes were awarded. Among the most remarkable of the animals exhibited are to be mentioned the shorthorn bull "Martin s chico Captain," winner of the champion prize, a superb animal weighing 1,807 pounds, and the Hereford bull, "Laurel," 20 months old and weighing 1,587 pounds. Prizes of 17,000 and 16,500 francs were awarded these two bulls.



VENEZUELA

The following persons have applied to the department of fomento of the Government of Venezuela for permission to establish NEW INDUSTRIES: Carlos Herrera, graphic advertising; Jesus Maria Mejias, manufacture of artificial coal for cooking purposes; Dr. J. Trujillo Arraval, stearine factory; Oswaldo Stelling, factory for the manufacture of cyanide of calcium, etc.; Isaac M. Gomez, for the extraction of oil from the Moriche palm; Oscar Deligne, for the manufacture of wines and other products out of tropical fruits; and Dr. Enrique Loynaz Sucre and associates, for the distillation of oil from oleaginous woods.—The Government of Venezuela has leased for three years, beginning November 15, 1913, to Ramon Felipe Mora the exclusive right to FISH FOR PEARLS off the Island of Margarita, in the sea and along the eastern coast of the Republic. The search for pearls will be carried on by means of the system known as "arrastras," or drags, until the Government permits the use of other methods. No fishing is to be done in waters containing only new and smooth shells known in Venezuela as "flor," this provision being made in order to prevent the destruction of pearl-producing shells. The Government agrees to turn over to the lessee, under a formal inventory, all of the apparatus, utensils, etc., used by it in exploiting



VOL. XXXVIII

FEBRUARY, 1914.

No. 2

FURS IN THE AMERICAS¹

THIE thrilling stories of Polar conquests that have come to us in recent years cause the thoughtful mind to wonder what those barren wastes hold in store for the human family.

The finding of the poles has served to awaken interest and to send numerous adventurers with well-equipped expeditions to study the newly discovered lands and to ascertain if possible their practical value to civilization.

Ever since the coming of man the subject of clothing the human form has occupied much time and attention, and some of the less remote lands of the Arctic and Antarctic Circles have long contributed a share of clothing materials for the peoples of the more temperate climes, and if polar exploration should serve only to advance or broaden the field of supply its work may not be in vain.

When the traveler reaches the world's southernmost city, Punta Arenas, he marvels at the magnificent furs exhibited in the local museum; if he takes a small steamer across Magellan Strait and lands on some isolated island he sees the Ona Indians arrayed in splendid furs. These semicivilized members of the human family, forced by the cold blasts from the Antarctic and the storms that prevail about Tierra del Fuego, have appropriated the skins and furs of animals for protecting their bodies. Few people are more remote from contact with the world, yet these savages clothe their bodies with coverings similar to those worn by Europe's royalty or that are sought by the kings of finance or the ladies of fashion.

Far back in the time of Marco Polo that famous traveler speaks of the magnificent furs worn by the Khan of Tartary, and the history of the struggles of the American colonies is interwoven with bartering with the aborigines for valuable furs; even the story of the founding

¹ By William A. Reid, Pan American Union staff.

of one American family's vast wealth is based on the exchange of musical instruments for precious furs.

At present the popularity of furs as an article of dress, especially among the ladies, is a cause that annually sends the hunter and trapper far into the wilds—to the haunts and habitations of many fierce animals. Advancing civilization has gradually lessened the area where these fur-bearing animals live and thrive, and in the United States to-day the seeker of the finest varieties suitable for domestic uses must go far to the north or to the south, or even beyond the boundaries of the country.

Speaking very broadly, there are only four varieties of animals that supply us with furs suitable for domestic uses. These are known as carnivora, rodentia, ungulata, and marsupialia, the first two being the most important classes. Under the first name are included foxes, bears, skunks, raccoons, martens, ermines, cats, lions, leopards, and others; under the second classification are found chinchillas, rabbits, squirrels, nutrias, beavers, muskrats, etc.; the ungulata group comprises many kinds of lambs, goats, and ponies; while the latter designation includes kangaroos, wallabies, and opossums.

The increasing demand for almost every variety of fur naturally leads to the inquiry as to the sources of supply and how long they will last. Continued warfare upon fur-producing animals can not be waged indefinitely without seriously diminishing or even exhausting the supply; but in numerous instances nature has thrown around many of her animals climatic conditions where man can not thrive, and when he does penetrate the animal's domain he is soon compelled to beat a retreat to more healthful climes. The Arctic region has long supplied the world with some of the finest furs, such as sable and silver fox, ermine, sea otter, etc., and it is said that the colder the country the finer the fur of the animal that lives there; the former fact bars the presence of man in great numbers, but however cold the climate the hunter will eventually reach the animal's habitat. Again, the discoveries of Amundsen, Scott, and Shackleton in the vast regions of the South Pole may open to the huntsman and trapper an undreamed-of paradise of hunting grounds regardless of the climatic conditions prevailing there. It would be beyond the scope of a short article to enter into the many details relative to the animals and where each species is found, hence a mere mention of a few sections producing the furs known to the trade as "precious."

The American sable, one of the finest varieties of fur, is found mostly in Canada, the best grades in the Hudson Bay section, while Alaska furnishes a poorer variety. The price the pelt originally brings varies from \$5 to \$75. The fur seal is found far to the north, principally on Pribilof and Copper Islands off the Alaskan coast. Other fur seals are taken in the extreme south about Cape Horn, the

Falklands, and as far north as Lobos Islands, near the mouth of the La Plata River. The hair seal produces oil and leather rather than good fur, but some of the best varieties are made into motor coats which are especially excellent for damp or rainy weather. Of the silver fox, the finest specimen of this little animal is found in Labrador, and is highly prized, the pelts often bringing in market \$1,500, although they are only about 10 by 30 inches in size. The hair is about 3 inches long, black and silvery. The white fox is also small in size, the pelts being only about 7 by 20 inches; this animal is found chiefly about Hudson Bay, Greenland, Labrador, and Siberia. The pelts from the latter country are rather more woolly and of a whiter color than those of America. Ermine, which for many years has formed a part of the formal dress of European royalty, is a small skin about 2½ by 12 inches; it is pure white with the exception of the tip of the tail, which is jet black. Canada furnishes a large supply of these furs, but the very best quality comes from Ishim, in Siberia.

Next in the classification of precious furs is the chinchilla. High up the eastern slopes of the Andes, 8,000 to 12,000 feet above sea level, and in sections of Peru, Bolivia, and Chile lives this little animal. It is a hopping rodent mammal somewhat resembling our common squirrel, and when standing upon its hind legs as it does in eating, the similarity is even more noticeable. Ordinarily the body of the animal is about 10 inches in length, exclusive of tail; it is covered with a grey fur, soft and silky, which on the sides is about an inch long. The animal burrows into the ground, and when in great numbers this burrowed condition of the earth renders it dangerous to ride horseback over their villages. The natives of the Andean table-lands, who are the chief hunters, employ dogs, and often the grison, of the weasel family; the latter is trained to enter the crevices of the rocks where the chinchilla is usually found during the day. Commercially there is considerable activity in the chinchilla industry, some wide-awake firms keeping a purchasing agent in the field during the shipping season, which is from January to July. The first chinchilla skins were sent to Europe early in the nineteenth century; and the price of them has steadily risen from that time until to-day, when a dozen good skins will cost \$150.

The nutria or coypu is a little rodent animal very much resembling the ordinary muskrat of the United States. It is found in many temperate sections of South America, usually along the fresh water courses, and when they come ashore to feed in the evenings the mother animal carries the little ones upon her back with almost human intelligence. The hind feet of the nutria are webbed; its chief food is found in plants along the streams; and unlike the beaver in the United States, the nutria builds no dams, although the two animals have many habits in common.

As a fur-bearing animal its chief value lies in a product that formerly was not eagerly sought, and the fur was exported to Europe and America and used largely for the manufacture of hats; even to-day the finest felt hats on the market are often made wholly or partly from the fur of the nutria. The increasing scarcity of all varieties of fur, however, have caused dealers to give more attention to the nutria. Improved dressing methods of the furrier now make it possible to produce very good ladies' coats, muffs, capes, gloves, etc., from the nutria; while the more inferior qualities are converted into lining materials for heavy clothing.

The size of the dressed skin is about 20 by 12 inches, and the hide brings in market from 40 cents to \$1.50, according to quality. The length of the fur is about half and very much thinner than that of the beaver, and it is also a coarser grade.

The viscacha is another South American animal belonging to the rodent mammal class. It is found on the Argentina pampas principally between the Uruguay River and the Rio Negro in southern Argentina. These little animals build mounds covering several hundred square feet, and then burrow into the mounds from various directions, emerging usually in the evenings for food which they find in grass, seeds, and roots. Upon the approach of man they rush into their mounds, and if pursued utter a growling sound. Their little villages, known locally as "viseachera," are cleared for a considerable distance around their habitations, everything in the way of natural growth being gnawed down and heaped upon their mounds.

The vicuña, of the highlands of Peru, Bolivia, and Chile, supplies a large and attractive fur well suited for rugs, robes, etc., for various domestic uses. This animal is a species of South American sheep; it resembles the guanaco found farther south, but the fur is shorter and finer. The writer recalls Bolivian experiences in purchasing these skins, where amusing incidents occurred and where some of the finest varieties are to be secured from native Indians and at a very reasonable cost.

The color is a golden brown, very rich looking, and shading from light to darker hues; they are highly prized by the natives as well as by foreigners, and the latter, on leaving the country, are pretty sure to include in their belongings the beautiful skin of the vicuna, which, as an adornment before their northern fires, is sure to attract attention and be greatly admired.

Fur seals of the world are divided into two general classes: Those of northern waters belonging to the genus *callorhinus*; those of southern, or Antarctic, to the family *arctocephalus*. These in turn are divided into smaller groups, known locally by numerous names.

Pribiloff Islands (Alaska) is the name of the largest seal habitation, although there are several habitations stretching from Alaska across

to Russian territory. The Pribiloff seals were discovered in 1786 by a navigator whose name the islands bear to-day. His ship was lost in a fog, and the bellowing of countless numbers of seals drew the attention of the mariner and his men to the proximity of land and probably saved their vessel from destruction.

Soon after the United States acquired Alaska in 1867 seal hunters from various countries were found in those waters in increasing numbers. A few years later the United States Government leased the seal islands to a commercial concern for 20 years, with the agreement that the seals were not to be killed in sufficient numbers to endanger their extinction.

Seal hunting off Alaska is arduous and picturesque in the extreme. Unalaska Harbor, the usual starting point, with its few houses and background of snowy mountains, is not unlike the lonely islands and settlements in the Strait of Magellan. Once the seal islands are reached, the animals are to be seen by the hundreds; sometimes there are as many as 12,000 in a single group. The larger or male seal weighs from 450 to 700 pounds, and when on land usually guards a small area of about 25 feet square; within this small plot the male seal may wait as long as a month for the arrival of females, and often with little or no food. The breeding grounds are the rocky beaches and hillsides along the shores, which reach their climax in seal population about the middle of July, when probably one-half of the seals of the islands are upon the land. The young seals learn to swim at the age of 4 or 6 weeks, and with the approach of winter they are old enough to join in the seal migration southward, which often extends as far as Lower California. The fur seals find their food in pollack, squid, and a small smelt-like fish that inhabits deep water.

The Pribiloff herd of seals produced from 1868 to 1897, 2,440,213 skins; and pelagic-sealing ships during the same period caught 651,282 seals. From the first date to 1892 the catch was valued at about \$35,000,000.

The seals on Lobos Island, near the mouth of the River Plata, and those on islands about Cape Horn belong to the *otaria australis* branch, and all of these seals are protected from extermination by the countries to which the islands belong: Uruguay, Argentina, and Chile; they yield commercial "sealskin," but the business is not so highly developed as that of the northern sealing waters. The *otaria ursina* family of Bering Sea, Sea of Okhotsk, and Commander Islands are better known in the commercial world and are said to produce a higher grade of fur. In 1897, the seal catch about Cape Horn amounted to only 1,265 skins; that of Lobos Islands for the same time is given at 12,791; while the total of all Bering Sea islands for 1897 was over 72,000.

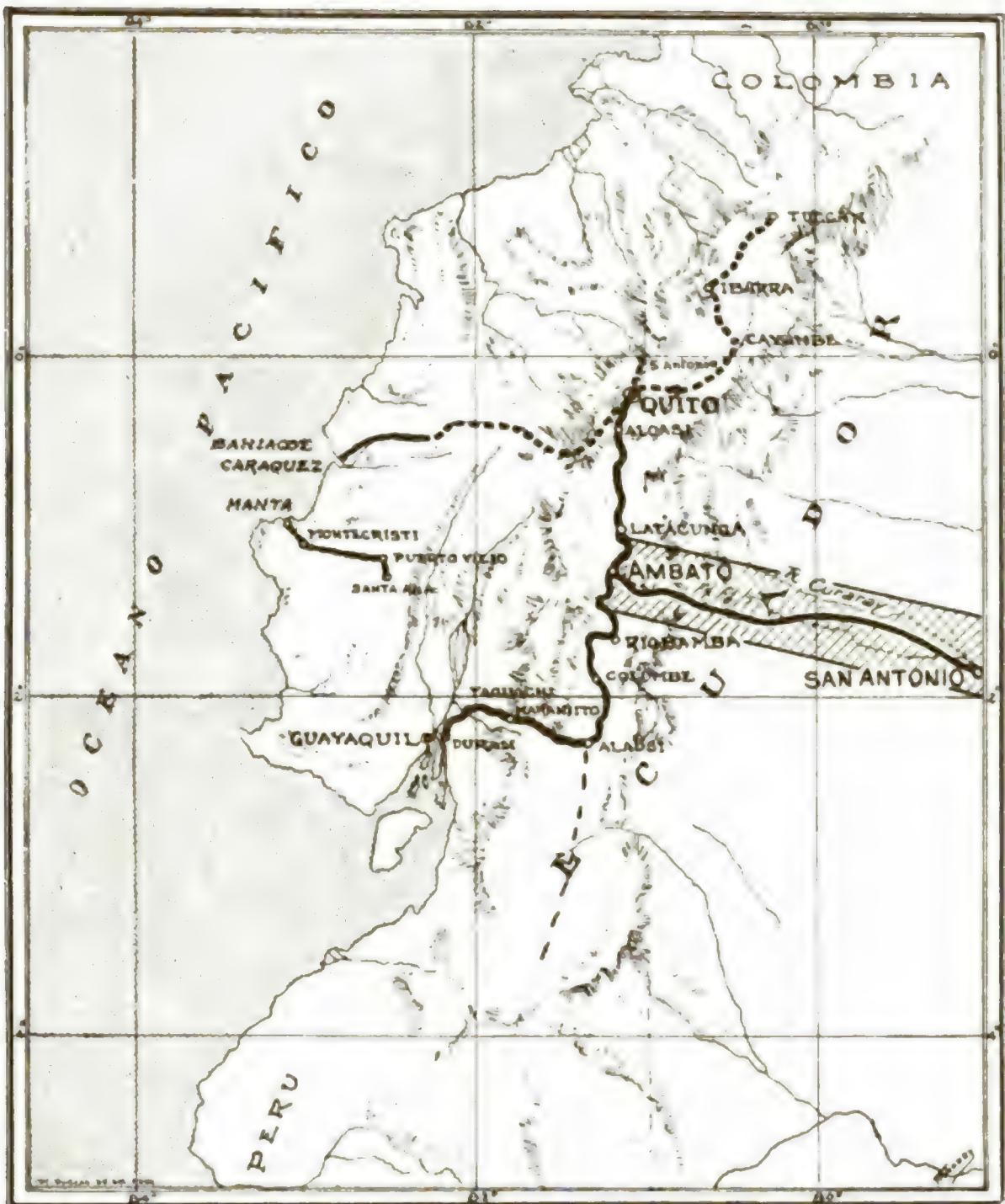
Owing to the progressive commercial policies of the United States Department of Commerce under Mr. Redfield, the sealskin fur market has been largely transferred from London to St. Louis, and the latter city is destined to become at once one of the world's leading emporiums for the fur-seal skin. Very soon and for the first time in history the Alaskan seal, as well as many other skins, are to be offered for sale in St. Louis. Heretofore it has been customary to send the Alaskan skins to London, but the Department of Commerce has brought about the change from foreign to home market, and it is believed that in making St. Louis the greatest sealskin market of the world many other industries will be benefited. The annual sales will attract furriers and dealers from all sections of Europe and America; while the fur dyers, whose industry is one of London's important enterprises, will naturally be attracted to the new trade center, where their business may be in close contact with raw materials.

Sea otter being one of the most precious furs is also one of the strongest, heading the list at the fur standard of 100 points of durability. The sea otter possesses a beautiful coat, the colors ranging from a gray brown to a rich black, while many of them have a sprinkling of silvery hairs, making them far more attractive. The otter is becoming scarcer each year and therefore more expensive, and it is recorded that one single skin, 25 by 40 inches, has been sold for \$2,000. They are found in the colder waters of the ocean. Contrasting with the extreme durability of the sea otter is the chinchilla, which is given at only 15 points; the seal is figured at 75, the sable at 60, silver and black fox at 40, and the white fox at 20 points.

Of the furs of lesser value the beaver stands well in the scale of durability, followed by the skunk, mink, lamb, marten, opossum, nutria, squirrel, lynx, etc.

In the fur trade the opportunities for the unscrupulous dealer are very great, and as comparatively few persons possess a familiarity sufficient to detect the deception, cheating is largely practiced. Colorings are extremely deceptive, and herein lies one of the chief cheating factors; as, for instance, hare skins are dyed the color of sable and often sold as such, and it is not until upon the wearer that the brittle and clumsy hare fur reveals itself. Garments made of rabbit skin are also frequently offered as "electric sealskin"; the nutria is also made in imitation of the genuine sealskin, and before the long hairs of the nutria are pulled and before being colored it is often offered as otter or beaver. Again, white-rabbit fur is often sold as white fox, and one of the precautions that might be exercised by the intending purchaser is to note the absence of the thick under-wool in the rabbit fur.

A few other deceptions of unreliable fur dealers are herewith mentioned: White-rabbit furs are often sold as ermine and, when



MAP OF ECUADOR SHOWING ROUTE OF THE AMBATO-RIO CURARAY RAILROAD
UNDER CONSTRUCTION.

This new line of communication it is believed will change the course of traffic of the interior of Ecuador. Heretofore the agricultural products have found a market by way of the Amazon; after the new railroad is completed the interior river port of San Antonio will be united by rail with Guayaquil, the distance being 337 miles and the controlling grade of the road about 2 per cent.

culty and expense of constructing proper cart roads or highways and their maintenance through such a district were considered inadequate as a means to attract the proper class of settlers, and taking these and many other matters into consideration it was decided to construct a railroad, and in this the administration looked to the commercial side of the situation. It was determined, therefore, to extend this railroad to San Antonio. This is a small village about 300 kilometers from Ambato, on the Rio Curaray, which is accessible at all times from the Amazon River for cargo boats of 3 feet draft. By the gain in time and freight charges in haul of 180 miles to Ambato over a controlling grade of 2 per cent, thence by the existing Guayaquil & Quito Railroad 157 miles to Guayaquil, the principal seaport, which is 870 miles from Panama, over the long haul down the Amazon, it is believed that much of this down-Amazon tonnage will be diverted and the road will derive an income from the beginning and will start local industries in getting out ties and stone and supporting the laborers on construction.

On October 19, 1904, Gen. Plaza, who was then president, approved a decree authorizing the chief executive to build a railroad between Ambato and the Rio Curaray, setting aside for the purpose funds already collected for the construction of a highway through the same district and establishing an income from other sources, and Luis A. Martinez, then minister of commerce and labor—a man of force, integrity and unselfish patriotism—was directed to go to the United States and arrange for engineers to make the necessary preliminary investigations and report. On March 13, 1905, he contracted with Charles H. Moore, then first assistant engineer of the Erie Railroad, who took with him to Ecuador seven North American engineers of experience, with full complement of tents and instruments, with Walter G. Fox, then division engineer of location of the Missouri Pacific Railroad, as assistant chief engineer of the expedition. The remainder of the party was made up of Ecuadorians and the entire project under the general direction of a patriotic junta composed of nine members, representative men from all the political parties, of which commission Dr. Alejandro Cardinas (now a member of the supreme court at Quito) was president.

The camp outfit, supplies, and instruments having arrived and organization perfected, work actually started on June 3, 1905, and proceeded without interruption until March, 1906, when, owing to change in the personnel of the Government with consequent change in internal policy, the survey was stopped. In the meantime, however, a thorough reconnoissance over the entire route had been made. The preliminary line had been run out for 75 miles, and over this distance accurate cross sections had been taken and contour maps completed and 12 miles of the location staked out.

In August, 1906, the matter was again revived, and the junta determined, with the funds it had then in hand, to proceed on the work of construction, and for this purpose tools and equipment for 1,000 laborers were purchased and shipped from the United States. But the new administration was averse to the proposition and the matter laid dormant until August, 1910, when there was a call for bids for construction, based upon a bond issue. On account of the condition of the market at that time, however, no bids were accepted by the Government. When Gen. Plaza was again elected Constitutional President in 1911, he revived his former aggressive policy of internal development in the way of public improvements, and among the many projects in this direction the Ferrocarril al Curaray was brought forward in earnest. The new junta consisted of Dr. N. Clemente Ponce, president (who was also a member of the former junta); Dr. Alejandro Cardenas, vice president (and former president); Srs. Manuel Escudero, Carlos Perez Quiñones, Joaquim Gomez Delatorre, Alberto Bustamente, Philoteo Samaníago, Rafael Bustamente (secretary), Carlos Mantilla (treasurer). To indicate that the administration was in earnest and that Congress was in accord with the policy of improvements, a resolution was passed and approved by the President on October 24, 1912, setting forth the new sources of income and in effect instructing the junta to commence work within six months from that date.

The granting of concessions and issuing of bonds are less popular in some Latin American countries than they formerly were, and it was concluded that the Government itself could, in doing this work by administration and in saving the bond discounts and expenses of promotion contractors' profits and insurance, perform the work in a little longer time, with a small increase in the amount set aside for interest and amortization, and own the railroad without debt. A contract for directing the engineering and construction was finally entered into with Charles H. Moore, principal engineer Erie Railroad Co., and Walter C. Fox, engineer in charge of construction of the southern extension of the Mexican National Railway, the same engineers who had made the preliminary studies, and the junta determined to construct the railroad with the accumulated funds and income provided, and conduct the work by administration through Dr. Modesto A. Peñaherrera, minister of interior, etc., and Mr. H. Dueñas, director general of public works.

At the last session of Congress all juntas were abolished, so that this work, as well as other public improvements, is directed by the department of public works, which has been organized on this basis. Exception was made, however, of the Junta Ferrocarril al Curaray which, because of its valuable and patriotic services, was retained in advisory capacity.

It was further determined that the construction of this railroad should also be a practical school for the national engineers who had been in college at home and abroad and who now would have an opportunity of becoming familiar with the methods and conditions necessary to consider in the location of railroads peculiar to their own country. The bulk of the corps is made up of national engineers, some of whom were on the preliminary survey. The first of the American engineers to go for the construction were Hugh Latimer, chief of party, formerly assistant engineer of the New York Central & Hudson River Railroad, and A. C. Hanston, engineer of construction, formerly resident construction engineer of the same company, and George Searight, formerly assistant track engineer of the Pennsylvania Railroad at the Sunnyside yards. Of the national engineers are Manuel Navarro, resident engineer; Egas Valdevioso, office engineer; Ricardo Rodriguez, draftsman; J. C. Garcia, levelman; Pablo Saa, rodman; E. Sanchez, rodman; and P. Guerrea, chairman, with full organization from nationals of superintendents and foremen.

The inauguration of the work took place on April 22, 1912, at Ambato.

At 1 p. m. the municipal council met formally and designated the main street leading to the station as Calle Luis A. Martinez, in honorable remembrance of the great patriot of that name, who died in November, 1909, and whose unselfish and patriotic zeal kept alive the enthusiasm for many years and made the final success of the project assured.

At 2 p. m. the governor of the Province of Tungurahua, Dr. Naranjo, with the council, Minister Peñaherrera, representing the Government, Señor Gomez Delatorre, representing the junta, followed by the engineers, 500 school children carrying construction tools decorated with flowers, citizens of Ambato and the Carchi Battalion, marched to the beginning of the line, where Dr. Peñaherrera turned over the first spadeful and where many speeches were made. A reception was afterwards held at the council rooms where refreshments were served. Later the directors, Messrs. Moore and Fox, held a reception at their headquarters where there were more refreshments, and the festivities wound up with a grand public ball which lasted well into the next day. Souvenirs in the form of parchment "Recuerdos" and silver medals suspended by ribbons of the national colors were struck off by the council. The next morning the serious work of construction commenced with 210 laborers. For some time there has been a strong anti-Yankee propaganda throughout South America, especially in Ecuador, which at first made the position of the directors somewhat difficult, but in a couple of months the confidence of the people was assured and with the Government paying every Saturday, plenty of laborers volunteered so that there is a total of about 980 at work, all that the tools so far delivered can take care of.

Some of the characteristics of the general specifications are gauge 42 inches, to conform to the gauge of the existing railroad with which the ferrocarril at Curaray connects at Ambato and for proper interchange of through traffic; 1,700 ties per kilometer; rails, 55 pounds per linear yard A. S. C. E. section; controlling grade, 2 per cent, all grades compensated for curvature. Forty-five kilometers of rail and accessories have been purchased and partly delivered. Two Baldwin locomotives of the Mogul type and 10 cars have been ordered and are under construction.

On account of the forests which commence a short distance from Baños, the last town, wood will be used as fuel until traffic warrants, when the abundant water power will be developed for electric traction.

Ambato, the junction with the existing railroad, is a town of 10,000 inhabitants situated in the Middle Andean Plateau, 157 miles by rail from the seaport of Guayaquil, and at an elevation of 8,500 feet above sea level, and is the capital of the Province of Jungurahua, a point where trade from the interior concentrates. Its market days are on Mondays, when about 3,000 natives come in with everything imaginable in the way of agricultural products. Its climate is delightful (temperature—maximum, 72° F., minimum, 42° F.); its rains are like the Temperate Zone. Besides the municipal offices, barracks, and jail, there are a cathedral, two churches, two hospitals, and a convent, well-regulated Government schools and an agricultural college, one brewery, and two clubs. It has three large plazas; monuments to national heroes, musicians, and writers; electric lights and water supply; and is surrounded by a rich fruit and agricultural country, where all kinds of vegetables and fruits, including celery, peaches, pears, apples, grapes, artichokes, alligator pears, strawberries, chiromogas, etc., are grown.

For 3 miles out of Ambato the line passes through well-kept haciendas following the right bank of the Ambato River, on the controlling grade, which then runs out level and into grades of 0.65 to 1 per cent. The gradient is down from Ambato to the Rio Curaray. At the village of Quillan, 5 miles from Ambato, the grades change and vary from 1 to 2 per cent. About 10 miles from Ambato is the confluence of the Ríos Ambato and Culapachan and the entrance to the canyon of the Rio Patate, which is 280 feet in depth and 3 miles in length. Fifteen miles from Ambato is the village of Patate, and a mile farther is the town Pelileo (population 3,000), located in the center of a farming district producing alfalfa, grain, sugar cane, fruit, and vegetables. At Pelileo the original line was run about 300 feet below the town, and investigations are now under way to determine the cost of developing the line into the center of the town. Banos, a town of 3,500 inhabitants, is 25 miles from Ambato and is the center of a well-cultivated farming section, being practically the end of population to the east, and the beginning of the wooded district.

There are boiling springs here from which it derives its name, and the place is much frequented on account of the medicinal properties of the water. There are the usual stores, a small foundry, hotel, and church, and cabinet shop, the proprietor of which latter holds a certificate of award from the St. Louis Exposition for excellence in cabinetwork. Four miles beyond Banos are the Falls of Agoyan, which, measured up, showed 260,000 horsepower. The Pastaza River at this point descends at an average grade of about 2 per cent, and for 1,500 feet above the falls curves to the left and drops 198 feet sheer. At the base on the right is a flat rock 200 feet square, and the side rock is vertical, a natural place for hydraulic development, requiring nothing for construction but the mechanical plant and an adjustable wing dam to control the water. For the next 10 miles the gradient runs from 1.2 to 0.5 per cent passing the Rios Margejitas, Negro, Topo (where there are auriferous indications), and Zunag—all through a territory heavily timbered. The village of Curaray is a small Indian village 30 miles northeast of Canelos and about 160 miles from Ambato. The climate all along the route was found exceedingly fine, the temperature ranging from 62° to 75° F., and rains not unusual, very similar to the Temperate Zone in being intermittent.

Barrancas, 55 miles from Ambato, which is at the confluence of the Rios Alpa Yacu and Pastaza, is situated on a level plain of many leagues in extent, at an elevation of 3,500 feet, a small settlement where the Government established an experiment station.

Here were found growing luxuriantly yucca, plantains, and sugar cane, beans, potatoes, and corn.

It is the intention of the Government to colonize this district, and, in anticipation of the railway, already a number of claims have been recorded by Ecuadorians from Ambato and vicinity.

The Puyo Valley, several miles in width, which commences a few miles farther on, is suitable for colonization, and near by the Castagnas Mountains—the source of the Rio Curaray. From this point the climate changes to higher temperature, the first encountered, and there is more humidity until the village of Curaray is reached at an elevation of 1,270 feet. In this district were found rubber, cocoa, tobacco, quinine, coffee, and vanilla growing in a wild state.

From Banos eastward all kinds of hard and soft woods are found in abundance, and those have been pronounced suitable not only for building purposes but for cabinetwork and any kind of furniture.

With the opening up of this great district of the east, and the placing of the Atlantic and Pacific Oceans into communication through a comparatively low-grade railroad, a tremendous development may be looked for in the smallest but one of the most energetic countries of South America, and with a continuance of the businesslike and patriotic policy of the present administration of affairs there can be no doubt as to the ultimate results.

A COMMERCIAL TRAVELER IN SOUTH AMERICA :: ::

ARICA, CHILE.

DEAR MR. EDITOR: Just before leaving La Paz, I sent you a letter on my experiences in preparing for this business trip to South America, and I ended it with my arrival at Callao, the chief port of Peru and the one through which the capital, Lima, draws her principal supplies. I at this distance have no means of knowing whether you received that letter, nor whether you decided to publish it in your BULLETIN, but rather than to wait to hear directly from you I am writing this second letter to get it on the next steamer north. By no means do I consider it waste of time to prepare it, because it certainly profits me more to sit here in this charming little club on the Plaza of Arica and to write my more or less serious opinions on travel than to idle away to no purpose the two days hanging on my hands till the next steamer southbound reaches port. Please rest assured, therefore, that if you never print my story I shall not consider it a rebuke, because all such memoranda are valuable to me, and I can always use them for comparing notes with other travelers whom I may meet in my wanderings or friends of mine up home who may be planning a similar tour.

Let me give two reasons, and perhaps the best among many, why I came direct from Guayaquil to Callao.

In the first place, no one of these northern ports of Peru is the controlling factor of the great commercial life of the Republic. Herein lies a difference between Central and South America. In that part of Latin America with which I am best acquainted, while the capital of the nation is the commercial as well as the social and political metropolis, it is at the same time (and the distinction is noteworthy) the center to which the traveler first directs his path and from which he can cover the territory in which he hopes to find business. San José in Costa Rica, for example, I naturally visit first, and from there I can most expeditiously arrange my route. The same holds true of Managua in Nicaragua, of San Salvador in Salvador, of Guatemala City in Guatemala, and to a modified extent of Tegucigalpa in Honduras, and almost every place in any Republic can be best visited by using the capital as headquarters.

Lima is, to be sure, the capital of Peru, but it does not influence altogether its commerce. In coming down from Panama the traveler passes several prosperous areas, served by seaports, which commercially speaking are relatively independent of Lima. In coming up

from the south, the same condition holds good of other areas. Since I felt impelled to carry out in Peru the system that had worked successfully elsewhere, I went to the capital first and there tried to catch the vital qualities at the heart of things. In doing this, I necessarily skipped such towns as Paita, Salaverry (the port for Trujillo), several of which have each a small railway running into the interior; but these places had best be left for one's second tour of South America. A man can not be ready for them unless he already knows Lima and the spirit she represents.

In the second place, not to plan to go ashore for strictly business reasons, means to have leisure for closer and more comprehensive examination of shipping methods employed on this west coast of South America. These differ most radically from what one sees in United States ports and to some extent in most ports on the Gulf of Mexico and the Caribbean Sea. There are few real harbors on the Pacific. But as few commercial travelers are acquainted with the south Pacific I'll try to give a picture of it from the commercial traveler's point of view.

The steamer works slowly up to within 1 or 2 miles of the port, the distance depending upon accident of weather. Down here there are but few storms, and when they do occur the steamer's captain (so some have told me) uses his judgment whether to make the port at all. When the usual station or in fact any position of safety is reached, down goes the anchor and the vessel drifts gradually into rest. The ocean swell is deep and long, although certainly no worse than what I have seen at Acajutla, Salvador. At any rate, barges and rowboats approach the steamer cautiously, and do not select the port or starboard side until it is determined which is the safer. Then the ladders, at the foot of which the small boats cluster, are lowered, while the barges come as close as they dare without being actually in contact. Seldom did I see a barge lashed to a steamer; they were as a rule attached to it only by a loose hawser, while I frequently watched a native whose almost only task was to fend off his barge when it threatened to come dangerously close to our vessel.

As it so seldom rains along this coast, the hatches are not clamped very tight, and it is therefore an easy matter to have them off and the hold accessible by the time the barges are alongside. Then the winches are set to work, and the cargo destined for that particular port is rapidly shifted from the vessel's interior to the more open spaces of the temporary receptacle that is to take this heterogeneous collection ashore. I do not remember to have frequently seen emptying and filling going on at the same time. Cargo to be discharged is removed before the barge receiving it casts off from the steamer to make way for the barge bringing an outgoing cargo to be transferred to this steamer. This latter process is sometimes carried

on while the steamer is slowly getting the anchor up and heading toward the open sea. Everything is moved by winches; much of the passengers' baggage and all of the cargo of whatever description or character goes overboard or comes into the space provided for it through their instrumentality. Whatever is packed in boxes or bales has a heavy rope thrown around it into a loop of which the giant hook of the winch is inserted; then hoisting is begun, out of the hold it comes, over the barge it is swung, and lowered gently to its temporary resting place.

This process is repeated at every port, and I never cease to admire the skill with which the winches are handled, the ropes thrown into place, packages adjusted so as to fit into each other, and distances calculated. If there are many small bundles, or if their contents is such that they might do damage to each other, a coarse netting is used for making a sling into which to collect everything that seems to belong there. Occasionally a sudden swell from the deep Pacific raises or sinks the attendant barge, and the winch boys miscalculate the distance into its bottom; then there is a jolt and the package at the end of the rope may suffer. Such accidents are few but unavoidable. When the barge reaches the landing place in shallow water, somewhat the same process is effected, only winches are apt to be smaller.

From the shore packages are hoisted into carts or onto the backs of men, but in many cases the local railway for the interior has a spur running onto the pier, and into its cars all freight is loaded for later delivery. Skids and trucks for that purpose are not in such common use as in the United States, yet the pier workmen are very clever and conscientious, allowing but few accidents as their freight passes through their hands.

All this may appear to you, Mr. Editor, very prosy and commonplace. I am trying, however, to explain to the commercial traveler who has never seen such change of cargoes just what gyrations his packages will be compelled to undergo before they reach the consignee. To be sure, in Central America's west coast somewhat the same conditions exist, but not many shipments from the United States nowadays reach those regions, the bulk of consignments going to the ports on the Caribbean where docking facilities are available. And, furthermore, many merchants and manufacturers who never thought of business with Central America are to-day thinking of sending their traveling men down this west coast to secure orders, or are even trying to obtain orders by catalogues and correspondence. If they do not have a conception of the conditions that must be met, much of their goods will arrive badly packed and damaged.

This bad packing is the bugaboo of the South American merchant buyer. I have seen it enough in my earlier work, and I see some of it now. Nevertheless, bad packing is not so general as it used to be, and United States shippers are learning the lesson of good

packing from their commercial rivals and from their own sad experience. One explanation, however, upon which the very first principle of packing depends, is given in the transportation methods absolutely necessary along this west coast, as I have tried to illustrate them. Let the manufacturer take notice. Goods damaged on arrival at destination are not so damaged because of careless or malicious handling, but because the very nature of transit permits of no other method than what I have just described. For the present at least this can not be changed. The simplest solution is therefore to pack at the warehouse for the treatment all boxes and bundles are sure to get. When the traveler has an object lesson such as is before his eyes nearly every day on this west coast from Paita to Callao, he will learn to comply with the demands of the merchants who buy his goods. When he realizes that a crushing weight of perhaps 2,000 pounds is suddenly applied to his boxes as they are hoisted out of the hold and are dangled at the end of the winch for five minutes, he will reinforce the sides of these boxes. Double care in this regard, even at additional expense, pays, and pays well. The purchaser is willing to have the cost of extra packing tacked onto his bill if he feels certain that his goods arrive with no disappointing per cent of damage when they finally are unpacked in his warehouse.

These were my thoughts as I hung over the rails of the steamer for an hour at a time, watching with a reasonably trained eye the same process go on at each port. I knew, of course, that the destination was by no means at hand when once the box or bundle arrived on shore. This might be only the beginning of the trip. At the little seaport some sort of a railway taps the more or less distant interior, but from its terminus some mountain city may yet have to be reached over rougher trails, on carts, on mule, or llama back, or perhaps even on the sturdy shoulders of men. Nevertheless, my own experience warranted me in the belief that a well-packed case, coming unharmed through the test of the steamer's hold, the winch, the barge, and the landing stage, will generally survive even the oxcart and the mule. One lesson in this connection I have learned here along the west coast. Much of the commercial area into which the traveler penetrates and ships his goods is accessible by the railway.

The commercial traveler may follow the same hint. Wherever the railway goes he can probably find a market, dependent upon the class of goods he is trying to sell. Only on rare occasions will he be tempted to resort to the diligencia or the saddle. For the tourist conditions may be different. Many delightful characteristics of life, much of the history, the people, and the beauties of nature are surely out of reach unless one boldly ventures into the heart of the country, and knowing other parts of Latin America as well as I do, I would not hesitate one moment to throw myself upon the hospitality of those whose environment is still undisturbed by the impatience of the steam engine.

So this brings me to Callao, the busiest port of Peru and the entrepôt for its capital, Lima. The approach to the harbor is attractive, for it is in reality a harbor, sheltered in most directions from wind and sea. On the right are two islands that give added protection, and the water front is as lively and solidly built as that of many of our own shipping places. Fogs not infrequently obscure the details, however. Thus it happened the morning I arrived that the steamer was obliged to crawl slowly to anchorage, and we were not permitted to land till past midday.

The fleteros (boatmen) crowd around the vessel, and are willing to bargain for the transport of passenger with baggage to the wharf, where the customs examination is conducted. Each fletero has a license tag, and the regular tariff for the use of his boat can be enforced, but as I know from long experience elsewhere, good-natured firmness on what is a proper price with a slight inclination to liberality will almost always give quick service and cheerful responses. The purser of the steamer, or in fact any one of the stewards who may have been on the coast long enough to give him knowledge from which to speak, can tell the passenger the average fee to pay.

In Callao this advance agreement is a matter of some importance, because it is wise to arrange for transportation clear through to the door of the hotel in Lima. So far as I could learn there are no very good hotels in the seaport itself, although respectable lodgings can be obtained there. This is easily understood, because the capital is only 10 miles away, with frequent trolley and steam car connection, so that nearly all travelers and even many business men live in Lima. I at first thought that it might be of advantage to stay a day or so in Callao, but everyone told me that nothing would be gained thereby, and that the wiser course was to go straight to Lima and to come to Callao from there at any time of day or night I felt so inclined. Let the stranger therefore bargain for delivery of himself and his outfit to the door of the hotel. I did so, and took my fletero along as guide and companion, learning from his pleasant gossip much practical information thereby.

The Peruvian libra is exactly equal to the British pound sterling, which is ordinarily quoted at \$4.86 $\frac{1}{2}$. Pound for libra and libra for pound they are interchangeable at stores, hotels, and ticket offices, while both are legal tender. But here in Lima, for the first time in my life, it happened that the sovereign, which is the unit in which my letter of credit is issued, was at a discount. In other words, a letter of credit payable in pounds is never cashed in that commodity, but the seller of the draft must take his money in currency of the country where he may present it. If, then, he wishes to get actual gold sovereigns he must buy them at market value, the same as if they were apples or other merchandise. It has cost me many a silver piece to buy gold money, which, as I said in my former letter, I always carry for

emergency. In Lima, however, British sovereigns cost less than libras (at least on that particular day), so that I actually received a premium for the exchange. I hope others may prove as lucky.

But to come back to hotels. Lima, like all towns and many cities in Latin America, has one best hotel. The traveler can find out its name from the gossip on the steamer coming down from Panama. In fact, it is always safe to ask a ship's officer or any acquaintance on the voyage what is the best hotel in the place, and the information given is sure to be satisfactory. Of course there are other hotels, some quite pleasant, but my advice is that the opinion expressed by fellow passengers is quite trustworthy. For the first time, at least, the popular hotel should be selected. After one has formed one's own opinion, an experiment may be tried. At any rate, the best-known hotel in any place is the rendezvous for pleasure and business. The residents assume that the traveler is staying there; it is the best spot at which to make an appointment, and if opportunity for any little entertainment arises, one can be confident that everything will be all right for all concerned.

Lima has great charm. I am tempted to give my impressions of the city, the first the average traveler down the west coast sees in South America, but I must keep to my subject. There is vigor here, but expectancy. Things are just about to be done. The life of the twentieth century is upon them, and while the past is always evident, the changes the future will bring seem close at hand. So much the better for the commercial traveler, if he makes the right start, for with acquaintance, friendships, and perhaps a clientele established, the man who has good goods to sell may expect a reward when trade through the Panama Canal adds a favorable factor to his competitive ambition.

A trip the traveler must make from Lima is that up the Central Railway to Cerro de Pasco. Many articles and many books have been written on this part of Peru, so I mention it only as a field for commercial activity. The scenic and other marvels speak for themselves. There is nothing to break the journey to the plateau, unless one wishes to ascend the 15,000 feet gradually. Neither need one be tempted on the first trip to visit other towns than Cerro de Pasco although several places should be marked as worthy of future investigation. Remember, I am exploring the ground for myself and trying to give advice to others, and for that reason I allow only the absolutely necessary time to covering what promises to be profitable now.

Experience so far has taught me that South America needs very careful studying if success is to follow my efforts. I have no time or money to waste, yet I want to reap the fullest value from this trip. For my own satisfaction I have learned that I must get right down to the people of the country, here even closer, perhaps, than in other countries where I feel more at home.

My first step, after quartering myself at a hotel, is to visit the United States consul, whose assistance is indispensable. He usually knows what to do and how to do it, and is posted on the commercial condition of his district. I like to say for my own satisfaction that in my inquiries I have always been welcomed and aided by him. But, poor man, I try not to bother him too much. He is a hard-worked official, and can not be expected or asked to know everything. Always keep in touch with him, however, and let him keep track of you, and the result will leave nothing to be regretted.

My next step is to go over carefully in a directory the names and addresses of those who may handle my line. But the distinctive subdivisions in a directory are not always a safe guide. In many instances a large and important dealer in particular merchandise may be concealed under the general title of importer and exporter or general agent. He may do a business of hundreds of thousands of dollars, and have agencies in a dozen or more places in the country, with only his name over the door. Be sure not to overlook any man or firm whose relationships with the commercial world are of an international character. Next I follow down the list of business houses whose interests may be aroused by what I carry, and I call on them one by one.

My last step is to go exploring. I mean that I wander about the city, look into shop windows, investigate the conditions and limitations of the local demand, and try to get acquainted with the retail dealers and even the customers themselves. I get thereby the current attitude of mind, and learn not only what chance I have for entering the market, but also what modifications should be made on my own line to meet the tastes or the requirements of the people who will buy. I have never tried to sell anything in this way, but it gives me a firmer clutch of knowledge and an ability to talk sense with any clients (*parroquianos*) present or to come. This implies, of course, a reasonable fluency in Spanish, but even lacking that, it is astonishing how much can be accomplished among all native classes here by a smile, patience, good nature, and an appeal to their curiosity. Moreover, this is the best practical school in the world, for I have often been astonished to find that an article which all dictionaries translate by one name will, among the people who use it daily, be called and sold by quite another. Having this local word in one's vocabulary helps a lot in making a sale.

Were I selling pianos, even, I should not hesitate to act thus, with modifications to suit the particular case. I have before me now a letter from a good friend who, like myself, is making the commercial tour of South America for the first time, although my knowledge of Latin America in general is far more extensive than his. He writes:

I have spent quite a lot of time in the shops themselves, demonstrating my product and teaching the native workman how to handle my goods. I thus make friends with the men in the shops, all of which seems necessary in my business, and I have made known by its trade name our products in the shops.

You see, he got right down to the bottom, and I am certain that he and his company will never regret the time or the effort it cost him. Referring again to my friend, he confirms my advice to take only the big cities first as furnishing plenty of work in reasonable time. He also cites another friend who is an old hand at the game, who reserves other places than the centers for subsequent trips, and he says that it is never possible to cover South America in one trip.

Following my own convictions, therefore, I came back from Cerro de Pasco, and took steamer again at Callao for Mollendo, planning to stay at Arequipa on my way to La Paz, the capital of Bolivia. Between Callao and Mollendo there are at least two ports, Cerro Azul and Pisco, which I had to put on my reserve list, although other towns are on the steamer's itinerary. The distance to Mollendo is 485 miles, and we were four days underway. I give this fact merely to show that one must not be in a hurry, nor make an inflexible itinerary, because disappointment is sure to follow. I utilize the time on a steamer for writing out my notes, making reports, and arranging for the future.

At Mollendo there seemed no good reason for delay, so I took the first train up the mountains, reaching Arequipa in the afternoon. In addition to the advantage of getting a good acquaintance with this town, a practice no traveler can afford to neglect, there is the further reason that it offers a convenient break in the journey between the seacoast and Lake Titicaca, which is 12,500 feet high, Arequipa being but 7,500 feet. Here the climate is delightful, and a few days' rest fits the traveler for the rarer air of the plateau above, and permits the necessary acquaintance with its markets.

Probably you think, Mr. Editor, that I ought to tell more of scenery, while I am talking shop. But I have intentionally omitted expressions of my feelings in passing through these wonderful countries, partly because I am shy and like to keep my enthusiasms to myself, partly because much has been written in the many books on South America, old as well as new, and I should be a poor hand at description compared with trained writers. Besides, these letters are stringing out beyond my original intention, as it is, and I wish to utilize all the space you can give me for unvarnished experiences and opinions on the workaday problems of the traveling salesman.

From Arequipa the train climbs in a short day slowly to Puno, on Lake Titicaca. Just before reaching that last station comes Juliaca, from which a line runs to Cuzco, also worth visiting, but to be entered as a point for a return trip to Peru, because it would take at least a week out of the schedule to make it. For the tourist it must be irresistible. Direct connection is made at Puno with the steamer across Lake Titicaca, and I wish to give my testimony as to the comfortable service offered. Not much of the lake can be seen on the through trip, because, as the train arrives late in the afternoon and as the steamer leaves soon afterwards, when it is already dusk, and as it

grows mighty cold on deck, there is nothing to do but to go to bed. Guiqui is the Bolivian landing place for the steamer, but it can hardly be called a town. The passenger hurries from the boat to the train, and leaves immediately for La Paz, arriving about noon. On the way is passed the station near which are the famous ruins of Tihuanaco, and it is to me a matter of deep regret that my sense of duty to my business compelled me to forego the pleasure of a visit to them. Really, such a trip as this entails one sacrifice after the other, because, so far as I have gone, through Ecuador and Peru, many, many days might be profitably spent in sightseeing, or in studying the historic treasures on every hand, or in admiring even to complete absorption the wonders and beauties of nature with which she has so lavishly endowed these fascinating countries. I yield none of my early love for Central America and its people when I say that I feel a new thrill of pleasure here nearly every day, and selfishly envy the tourist who may have time and freedom to enjoy without stint the fascinations of the Andes.

And at least I am in La Paz. Standing at the brow of the precipice, or, if one prefers, at the edge of the huge barranca in whose bowl lies the city of La Paz, I am awestruck at the gigantic craftsmanship of nature in forming such a nesting place, and at the temerity of man in making this strange depression his home. But on closer acquaintance with La Paz itself, as the abode of live and active human beings, I am surprised that due credit has not been given to the modern features of this capital. In all books I have so far read on the city, emphasis was laid on its quaintness, its hiddenness, its remoteness in both place and time. All this is true, from a superficial romantic point of view. But what is needed besides this glare of uniqueness, is counter-emphasis on the striking up-to-dateness of nine-tenths of the factors that make a city what it is to-day. La Paz is delightfully modern in many ways. The streets are paved with cobblestones, and are so steep that few horse-drawn vehicles and automobiles are seen, but on the other hand it has a good electric trolley-car service and illumination. Most of the houses have the definite touch of Spanish America impressed on them both without and within, yet recently built structures there are in plenty, and I am not so sure that they serve their purpose better than those put up by the Spaniards many years ago. As for the people, it must be at once granted that a large proportion are of aboriginal stock, but the noticeable element which is of Spanish blood has retained to a remarkable extent the vigor which was inherited from sturdy European stock, and the natives have been influenced thereby. La Paz, and in fact all Bolivia, is alive. I felt it the first day I arrived, and instead of dreaming of the past, I was kept busy with the present and taking note of the possibilities for the future.

I did not feel half so remote here in lofty La Paz as I have in many places in Mexico not 500 miles from the Texas border. I have danced a two-step with music from a fine pianola, and in the same room I heard, besides Spanish, familiar talk in English, German, and French. Social life differs not at all from that in any large Latin city of the Old World or the New.

These incidents are thrown in, Mr. Editor, to attempt to destroy the delusion I have discovered in reading, or have heard from ordinary travelers, that Bolivia is out of the world. The very opposite is the case, especially from the point of view of the commercial traveler who is looking for a permanent market and can forecast the future. I advise every man to come to Bolivia. Practically everything can be sold here. It is only a question of studying opportunity, estimating costs, and meeting the requirements of the consumers. In addition to La Paz, there are other cities in Bolivia, and note should be made of them for a future visit, if (as I regret to say was my own case) they can not be covered on the first trip. These are Oruro and Potosi, on the railway; Cochabamba, Sucre, and perhaps Tarija, as yet off the railway but accessible by stagecoach or mule back. Others may be added as experience dictates, but these will suffice.

I promised a few words on the climate of La Paz, and these must be given now. It is cold; for one who has been continuously in the Tropics, I found it always cold (about 55° to 65° F.), although in the middle of the day out of doors the sun was pleasantly warm. The evening and night are chilly. It was necessary for me to wear my warmest clothing and to keep moving. A few of the houses have small portable oil stoves in the drawing-rooms, but the hotel, the club, and public buildings were without artificial means of heating. The temporary visitor must therefore prepare for this low temperature by carrying thicker garments, even if they should be discarded on leaving Bolivia. Neither this cold nor the thinness of the air is unhealthy, if the traveler has not a weak heart nor impaired lungs, and, thank heaven, I am not failing in either health or habits.

Now, Mr. Editor, I have written too much and, so it seems to me, have said too little. It is about like my trip, where I have so far seen and learned a great deal, but I feel that I have left out quite as much as I have accomplished. South America is huge—very much greater than I had imagined when I started—and I know I shall be compelled to put aside many important things for a second visit. So I have omitted from this letter many details that were of value, while I tried to crowd into it those points that impressed me as most vital to a man gathering information from first-hand experience. You must be the judge of the success of my efforts and cut out whatever may be superfluous. *Hasta luego.*

VIAJERO.

ACROSS UNKNOWN SOUTH AMERICA¹ :: :: :: ::

THE Pan American Union has just received a copy of Mr. A. Henry Savage-Landor's most recent book, *Across Unknown South America*. This voluminous work will prove a valuable addition to any library, inasmuch as it gives a wealth of detailed information anent the geology, topography, zoology, soil, vegetation, and general physical characteristics of some of the interior portions of Brazil based on the personal observations of an experienced explorer.

Before dealing with the work it may not be amiss to state that the author is one of the most widely traveled explorers living to-day. He has published a number of books dealing with his former travels in Japan, China, South Mongolia, Corea, Tibet, India, Nepal, among the Ainu of Yezo and the Kurile Islands, across Persia, Afghanistan, Beluchistan, among the Philippine Islands, and the Sulu Archipelago. He has traveled extensively in the United States, Canada, Australia, the Azores; has crossed the African Continent at its widest part, and visited Jamaica, Madeira, and the Republic of Panama. His recent expedition in South America included the Republics of Brazil, Peru, Bolivia, Chile, and Argentina, to which task he brought the vast experience gathered in the many out-of-the-way places he formerly visited.

The book is a detailed narrative of his experiences and observations in exploring a portion of the interior of the vast Brazilian States of Goyaz and Matto Grosso, his subsequent journey down the Arinos and Tapajos Rivers into the Amazon, and thence to Para, the great rubber port of Brazil. From Para he made the usual trip up the Amazon to Manaos, thence to Iquitos, and from there by small launches to Yessup, Peru, and thence on mule back across the Andes to Lima. The remainder of the journey lay along well-beaten paths and had no special significance, his description of places visited and details of experiences being more or less in line with those of the average English tourist.

The results of Mr. Landor's expedition may be briefly summed up as follows: (1) It proved that it is possible for an experienced traveler to cross Brazil, perhaps in almost any direction, with a comparatively

¹ *Across Unknown South America*, by A. Henry Savage-Landor, author of *In the Forbidden Land. An Explorer's Adventures in Tibet, Across Wildest Africa, etc.*, with eight full-page plates in color, numerous illustrations from photographs, and maps. In two volumes, with 816 pages of text. Little, Brown & Co., Boston, Mass. Price, \$10.

small number of helpers. (2) It afforded evidence that the Indian population of the comparatively unknown interior of the country, at least of that portion through which Mr. Landor's route lay, is generally greatly overestimated; also that the dangers from savages, wild beasts, poisonous serpents, etc., are usually exaggerated. (3) The meteorological observations daily recorded are a distinct acquisition to our knowledge of the country. (4) Mr. Landor's altitude observations, recorded almost daily and forming a complete chain across the continent, will serve to correct many errors shown in existing topographical maps of the country. (5) His survey of the country between the Araguay River and the Madeira, and his careful survey of the Arinos River and of the Arinos-Juruena, the latter being one of the large tributaries of the Amazon, are perhaps the most valuable features of the excellent record of his observations. (6) His observations relative to the headwaters of the following important rivers: The Rio Vermelho, Rio Claro, Rio Araguaya, Rio Barreiros, Rio das Mortes, Rio S. Lourenco, the Cuyaba, the Xingu, the Paranatinga, the Paraguay, the Rio Arinos, and the Secundury are all of geographical importance. (7) The Tapajos River was given a thorough study throughout almost its entire course. (8) The publication of vocabularies containing quite a large number of words of the Bororo, Apiacar, Mundurucu, and Campas or Antis Indians is also a feature of interest to those interested in Indian philology.

In the preface Mr. Landor lays some stress on the alleged fact that he was able to collect evidence as to the correctness of a theory he has long held relative to the present formation of the earth's surface. Inasmuch as the theory advanced is unique and in conflict with what have hitherto been regarded as well-established geological facts, the following excerpt is quoted:

One has only to look at any map of the entire world to see what really happened to the earth in days long gone by. Let me first of all tell you that there never existed a continent between Africa and South America. In fact, I doubt whether there is as much as a square mile between these two continents more submerged to-day than it was thousands upon thousands of years ago.

Here is what really happened: The earth at one period changed its shape—when is merely guesswork and is of no consequence here—and the crust of the earth—not the core, mind you—split into two great gaps from pole to pole, with a number of other minor fissures. In other words, the earth opened just like the skin of an overheated baked apple. The African and American continents, as well as Australasia, with New Guinea, the Celebes Islands, the Philippine Archipelago, and China, which before that event formed part of one immense continent, thus became divided, leaving North and South America isolated between the Atlantic and the Pacific, which were then, and only then, formed.

It is easy, by looking intelligently at a map, to reconstruct the former shape of the world. You will notice that the most western portion of Africa fits exactly into the gap between North and South America, while the entire African coast between Dahomey and the Cape Colony fits perfectly in all its indentations and projections into the coast line of South America. The shores of western Europe in those days

were joined to North America and find to-day their almost parallel and well-fitting coast line on the east coast of the United States and Canada. On the opposite side of the world, the western side of South America, the same conditions can be noticed, although the division of the two continents (America and Asia) is there much wider. Fragments were formed, leaving innumerable islands scattered in the Pacific Ocean, half way between the actual continents of Asia, Australia, and America. A mere glance is sufficient to show how well Australia fits in along the Chilian and Peruvian coast, the great island of New Guinea along part of Peru and Ecuador, and the west coast of the Central American isthmus. The Philippine Islands probably in those days lay alongside of Guatemala, while California bordered on Japan.

It is to be regretted that Mr. Landor fails to develop his theory, at least to the point of informing us just whence came those rather large bodies of dampness, the Atlantic and Pacific Oceans, which were formed "then, and only then," when the earth popped open like "the overheated baked apple" aforesaid.

Up to the time that Mr. Landor left Goyaz with his motley company of six men, four of whom were criminals who had been released from prison by the governor of the state of Goyaz upon agreeing to accompany the explorer, the narrative of his journey and account of his preparations is somewhat tedious, with unnecessary details of personal experiences, criticism of existing conditions, fulsome praise of notable people who showed him many courtesies and caustic comments anent the characteristics and modes of life of the common people. In fact, too much detail of petty annoyances, such as quarrels with his men, constant complaints as to the presence of troublesome insects, and accounts of trivial occurrences incident to travel in tropical countries detract somewhat from the general excellence of his book, which contains so much that is not only interesting but extremely valuable.

His descriptions of the general topography, soils, vegetation, and physical features of the country through which he traveled are excellent and comprehensive and give the reader some idea of the magnificent undeveloped agricultural and pastoral resources of Brazil. The following paragraphs, relative to the portions of Matto Grosso through which the author's route lay, will serve as fair examples of the work in this regard:

The green country before us, in great sweeping undulations, reminded one much in its regularity of the great waves of the ocean, what sailors call "long seas." Where the stream had cut through and left the underlying dome of lava exposed, one could easily judge of the thick deposits of sand, ashes, and pulverized rock which formed the strata above it.

We traveled over more red volcanic sand for some 4 kilometers, rising to 1,400 feet, on which elevation was thick matto, or stunted much entangled forest. Then we emerged again into glorious open country, marching over a stratum 8 feet thick of whitish tufa and ashes, this stratum lying immediately above one of red volcanic earth. The strata were easily measurable where rivulets had cut deep grooves in the softer superficial strata and had reached the foundation layer of lava.

The campos seemed to grow more and more beautiful as we went west. What magnificent grazing land! One could imagine on it millions and millions of happy, fat

cattle; but no; not one was to be seen anywhere. What a pity to see such wonderful country go to waste! There was everything there, barring, perhaps, easy transport, to make the happiness and fortune of thousands upon thousands of farmers—excellent grazing, fertile soil, good healthy climate, and delicious and plentiful water—but the country was absolutely deserted.

For miles the beautiful prairies extended, especially to the southwest, where in the distant background loomed a high, flat-topped tableland, interrupted by two deep cuts in its extensive, monotonous sky line. Those cuts were near its southern end. To the south stood a long range of wooded hills, also with an absolutely flat sky line. We ourselves were not higher than 1,400 feet above sea level.

Again, when he was at the headwaters of the S. Lourenco River, he writes:

That was a day of great domes—all of them with perfect curves. On them the grazing was magnificent. To the north a wonderful green dome, larger than the others (elevation 2,650 feet), would have been splendid for cattle raising. Not a sign of life could be seen anywhere. Seldom have I seen nature so still and devoid of animal life. What immensity of rich land wasted! It made one's heart bleed to see it. There was everything there to make the fortunes of 100,000 farmers—yet there was not a soul. There was good grazing, plenty of water. There were no roads, no trails, it is true, but with a little enterprise it would be easy to make them. With a railway passing through, that now wasted land should become the richest on earth.

From an ethnological viewpoint the most interesting portion of Mr. Landor's work is embodied in the four chapters dealing with the Bororo Indians. It is in this field that the author's keen powers of observation, his extensive acquaintance with primitive tribes of other lands, and his own enthusiasm for the subject stand him in good stead, and lead him to tell a story of wonderful interest. His study of the Indians was conducted along scientific lines, and however much we may disagree with some of his conclusions relative to their origin and their kinship with the Australoid or Papuan races, his detailed analyses of their physical characteristics, their customs, modes of life, superstitions, etc., are of great ethnological importance. Only a few typical paragraphs may be quoted, such as his description of the first uncivilized Indian he saw and the characteristics of others of the tribe.

While I was reassuring my men, an Indian appeared, bow and arrows in hand. He stood motionless, looking at us. My men, who had not noticed his coming, were terrified when they turned round and saw him.

The Indian was a strikingly picturesque figure, with straight, sinewy arms and legs of wonderfully perfect anatomical modeling, well-shaped feet—but not small—and hands. He was not burdened with clothing; in fact, he wore nothing at all, barring a small belt around his waist and a fiber amulet on each arm. * * *

The first thing I did was to take a snapshot of him before he moved. Then I proceeded to the interesting study of his features. They were indeed a great revelation to me. One single glance at him and his comrades persuaded me that a theory I had long cherished about the aboriginal population of the South American continent was correct, although in contradiction to theories held by other people on the subject. I had always believed, for reasons which I shall fully explain later, that South America must be peopled by tribes of an Australoid or Papuan type; people who had got there

directly from the west or southwest, not by people who had gradually drifted there from the north. * * *

To return to our man. I was greatly impressed by the strongly Australoid or Papuan nose he possessed—in other words, broad, with the lower part forming a flattened, depressed, somewhat enlarged hook with heavy nostrils. In profile his face was markedly convex, not concave as in Mongolian faces. Then the glabella, or central boss in the supra-orbital region, the nose, the chin, were prominent, the latter broad and well rounded. The cheek bones with him and other types of his tribe were prominent forward, but not unduly broad laterally, so that the face in front view was, roughly speaking, of a long oval, but inclined to be more angular—almost shield-shaped. The lips were medium sized and firmly closed, such as in more civilized people would denote great determination. His ears were covered up by long, jet-black hair, perfectly straight and somewhat coarse in texture, healthy looking, and uniformly scattered upon the scalp. The hair was cut straight, horizontally high upon the forehead, which thus showed a considerable slant backward from the brow to the base of the hair. A small pigtail hung behind the head. The hair at the sides was left to grow down so as fully to cover the lobes of the ears, where again it was cut horizontally at the sides and back of the head. The top of the head was of great height, quite unlike a Mongolian cranium.

The eyes—close to the nose and of a shiny dark-brown—had their long axis nearly in one horizontal plane. They were set rather far back, were well cut, with thick upper eyelids, and placed somewhat high up against the brow ridges, so as to leave little room for exposure of the upper lid when open. * * *

On that, as well as on later occasions, I noticed two distinct types among the Bororos: One purely Papuan, or Polynesian, the other strongly Malay. The characteristics of those two different types showed themselves markedly in every instance. The majority were, perhaps, of the Malay type. I was intensely interested at the astounding resemblance of these people to the piratical tribes of the Sulu Archipelago in the Celebes Sea, where, too, one meets a considerable amount of mixture of those two types, as well as specimens of pure types of the two races.

Among the Bororos many were the individuals, of the Malay type, who had the typical Malay eye, à fleur de tête, prominent, almond-shaped, and slightly slanting at the outer angle. The nose, unlike that of the Papuan types, was flattened in its upper region between the eyes, and somewhat buttonlike and turned up at the lower part—just the reverse of the Papuan types, who had prominent aquiline noses with a high bridge and globular point turned down instead of up.

The above paragraphs are typical and show the careful and detailed study given to the Indian tribes the author met in his extensive journey. After many hardships the party finally struck the Arinos River at Porto Velho. It was there that the horses and mules were abandoned and the survey of the river undertaken in an old canoe.

The first few days of the journey down the Arinos seem to have been delightful and the author gives us vividly graphic pictures like the following:

Soon after leaving camp, all the happier for an excellent lunch, we came once more to thick, beautiful, clean forest on both sides. Again rubber was plentiful, and absolutely untouched by the collector's hand. The river was getting amazingly beautiful, 200 meters wide all along, the water like a faultless silver mirror irreproachably reflecting each leaf, each branch of the motionless trees on both banks. There was not a breath of wind to disturb the tranquillity of that deliciously restful scene.

Yet one more gorgeous island, Alastar Island, 300 meters long and 80 to 100 meters wide, was seen. It was preceded on the southeast side by innumerable gravel mounds

just emerging above the water surface, then by a magnificent gravel beach with numberless beautiful crystals. On the left bank a tributary 15 meters wide entered the Arinos from the southwest.

The river was getting more entrancing at every turn. Profuse blossoms of the most gorgeous yellow shone resplendent in all their beauty against the background of dark-green foliage. The entire edge of the forest was festooned with daintily leafed creepers and with myriads of convolvuli of the purest amethyst color.

Paragraphs like the following indicate that the Arinos is a veritable fisherman's paradise:

Immense quantities of fish could be seen in the river. No sooner had we made camp than we got out lines and hooks of all sizes, which we baited with pieces of toucinho. One end of the bigger lines we made fast to trees, as the fish we often caught were so powerful that on several occasions they had dragged us into the water and we lost not only the fish but the line as well. We had great sport that night and caught quantities of trahira (*Macradon trahira*), not unlike a giant salmon and quite as good to eat, and also some surubim (*Platystoma Lima*), a large fish belonging to the herring family. * * * Although after a few minutes we had killed fish enough to last us, had we been able to preserve it, for some weeks, my men sat up the greater part of the night hauling quantities to the bank. The excitement each time a fish 80 or 100 pounds in weight was hauled out of the water was considerable.

The dangers encountered in navigating tremendous rapids, the hardships endured in attempting to cut through the primeval forests and the wandering through the wilderness of the author and two of his men for a period of 16 days without a morsel of food, all form a remarkable story of courage, endurance, and grim determination that can not fail to arouse the reader's interest and admiration. Taken in its entirety, the book is a valuable contribution to the literature of to-day, dealing with explorations in the unknown portions of South America.

C. E. A.

A CAPITAL OF ALL THE WORLD :: :: ::

CREATION of a World Centre of Communication is the title of a remarkable book whose contents are devoted to the promotion of a grandly idealistic project, the details of which have been conceived and perfected after 10 years of altruistic study and labor on the part of Hendrik Christian Anderson, an American-Scandinavian sculptor who resides in Rome.

The massive volume, containing 102 pages 18 by 12½ inches in size and many sumptuous illustrations and architectural drawings, unfolds a concrete plan for the establishment of an ideal world city

where all international activities are to have their home and find their inspiration. Some 40 or more collaborators, including artists, sculptors, architects, painters, engineers, and translators, have aided in producing this monumental work. The historical part was contributed by Gabriel Leroux, professor at the University of Bordeaux; the architectural part by Ernest M. Hébrard, architect of the French Government, with the assistance of Jean Hébrard and the collaboration of many other noted architects, artists, etc. An edition de luxe of 500 copies of the work has been published for presentation to the rulers of all nations and as far as possible to national libraries, institutes, colleges, and associations of international interest.

The need of such an international world center of communication, according to the author of the plan, is becoming more obvious as more attention is being paid to international relations, and it is but a question of time until the vital necessity for it will be recognized throughout the civilized world. In the introduction to the work the author writes:

In reviewing the past a world movement toward greater and greater centralization is clearly evident. It is based upon widening conceptions of cooperation and tends to accomplish ends greater than can be performed in isolation. It aims at the destruction of the enforced cooperation, which is called slavery, and substitution of a spontaneous union of forces for the mutual advantage of all concerned. We are able to follow intelligently, almost step by step, the progress that humanity has made in the world from prehistoric times upward, from the more or less isolated family to larger groups, united for the protection of themselves, their ideals, and the products of their labor.

The very fact that nations depend more and more upon harmonious and peaceful economic relations facilitated by science and culture assures us that at no remote period of time the difficulties of cooperation must be resolved by the establishment of an international center of communication. With this consideration in view, these plans and suggestions for the Creation of a World Centre of Communication are presented after years of concentrated study and application. We are convinced that practical development depends upon comparison; so, strengthened by an ever-growing faith that man will attain greater heights through unity of purpose and fellowship, this center is conceived upon imposing monumental lines, destined to house and centralize human accomplishments, spiritual and intellectual, scientific and economic. We are certain that if this center could be established on a broad basis it would afford undeniable and unlimited advantages to nations and to peoples in all parts of the world. It could not only house and unite the already well-established international institutions, but would facilitate their expansion. It would encourage the desire, ever increasing in the world, for unification, and it would give a strong impetus to the progress of religion, science, and justice. In addition, a stronger international foundation stone for peace and fellowship would be laid.

Incidental to the conception of this ideal world center is the formation of an international organization known as the World Conscience Society, whose purpose it is to develop more peaceful and fraternal international relations by the establishment of such a "center," in which to concentrate interests of universal utility,

whether physically, morally, artistically, scientifically, or spiritually.

This proposed international city is to be a city of light, health, wide avenues, parks, playgrounds, fountains, lagoons, and noble buildings. It is to be a city without slums, a city of efficiency, convenience, and beauty. Not only in structure, plan, and equipment will it be the ideal city, but it is intended to become the intellectual, artistic, and practical international capital of the world; a clearing house for the various social, cultural, scientific, and political aspirations of humanity.

As designed it will cover some 10 square miles of ground. Its architectural plans are so drawn that it can be built at almost any spot accessible to the sea that the nations may choose. While there is ample room within the limits of the city for the homes of its permanent inhabitants and the necessary business and manufacturing plants, the heart of the city is composed of buildings adapted for the unification of international interests. These are grouped into three centers devoted respectively to science, art, and physical culture. The scientific center is connected with the center of art by the broad Avenue of Nations, flanked on either side by palaces which will house ambassadors and delegates representing their respective nations. It has for its crowning motif the gigantic Tower of Progress, which rises to the height of 320 meters. On the summit of this tower will be installed a plant of wireless telegraphy and in the lower floor of its colossal base will be found a world printing press.

The tower rises in the midst of a circular space set apart for international congress buildings for medicine, surgery, and hygiene, law and criminology, electricity and invention, agriculture and transportation, all of which are provided with halls, libraries, museums, and accessory offices. To the northeast is the International Hall of Justice and to the southwest the Temple of Religions. Completing the conception stand an international bank or clearing house and a world reference library, while in gardens near by are found the international institutes of higher learning. The art center is connected with the physical culture center by means of gardens devoted to horticulture, natural history, zoology and botany. An imposing Temple of Art, forming the chief monument of this center, was planned with spacious halls and galleries for sculpture and painting, surrounding a vast auditorium.

The physical culture center is intended to facilitate a world reunion of athleticism and to promote the scientific development of the human form in all nations. A vast stadium is therefore its central feature. Near it is a large natatorium, gymnasium for men and women, and open fields and athletic quadrangles for international expositions and contests.

PAN AMERICA IN THE MAGAZINES :: ::

Rio de Janeiro is the title of the article in *The Outlook* for December 20, 1913, in which ex-President Roosevelt outlines his impressions of the beautiful capital of Brazil. His second article, which deals more with the people he met and in which he analyzes their characteristics and describes their remarkable national development, appeared in the issue of January 24, 1914.

While much has been written anent the giant Republic of South America, its people, and its unique capital, the observations of as eminent an author, statesman, traveler, and student of men and affairs in general as is Col. Roosevelt are worthy of all possible publicity. Hence, *THE BULLETIN*, in its several language editions, presumes to quote somewhat copiously from these two articles, which show the genuine appreciation of the national life and progress of one of our southern sister Republics on the part of the man who for nearly two terms steered the "ship of state" for the great Republic of the Northern Hemisphere.

After his introductory paragraphs, which deal with the beauty and cleanliness of the capital of Brazil, its broad and busy streets, its handsome public buildings and private residences, and the healthful conditions which prevail, Mr. Roosevelt continues as follows:

Altogether, it is difficult to write of this city of over a million people without expressing astonishment that both its beauty and its greatness are not more widely understood. It should be a familiar object to all ordinary travelers. The people of the United States do not realize what a wonderful city this tropic capital is, wonderful not only in beauty, but in its extraordinary material activity and achievement. Fortunately, South America is becoming more and more accessible to the people of the United States. It is much to be wished that young Americans would visit their neighbors to the south of them before they make a European tour, just as it is much to be wished that dwellers on the eastern coast would, wherever possible, take some trip at least as far west as the Pacific before they cross the Atlantic Ocean. Fortunately, the tide of travel has now turned. We are on the eve of seeing full recognition by our people of the varied interest that inheres in a trip to the lands south of us and of the prime business need of establishing closer commercial relations with these lands.

The major part of South America has witnessed an extraordinary growth, both industrial and political, during the last dozen years. Brazil is one of the countries in which this growth has been particularly evident. Provided only that there is reasonable political activity, the twentieth century will be the century of South America; that is, there will be greater rapidity of growth, greater relative increase of prosperity in the South American Continent than in any other. * * * The period of great and rapid growth was slow in coming. But it has come. Of recent years, in the more progressive countries there has been a literally astounding development both of orderly stability and justice in government and of material prosperity.

Brazil offers one of the striking examples of this growth. Nowhere in any nation of the world has a more enlightened policy been pursued than that pursued by the statesmen who have had the control of Brazilian affairs during the past 15 or 20 years. The results are everywhere evident. One of the places where they are most conspicuous is Rio de Janeiro itself.

In all essentials the city is now merely an unusually good example of one of the world's great capitals. The management of traffic by the police, the work of the street-cleaning department, the electric lighting, the excellent asphalted pavements, the trolley lines, the handsome buildings, public and private—all these things and hundreds of others could be instanced as showing that Rio de Janeiro is as progressive as any one of our great cities in the United States. In some points she is distinctly ahead of us—in the Municipal Theater, for instance, and in much that has been done for beautifying the city. Many of the streets are lined by double rows of the stately royal palms, making the finest of all imaginable colonnades. The long drive along the brave bay front is something quite unique. There are difficult problems and unpleasant problems in Rio, of course, but so are there in all our own great cities, and the matter of most importance is the striking success that has been achieved along so many lines, business and governmental. The beauty is no more evident than the business development. Rio is an old city, but of late years it has gone ahead, and it is now going ahead, as fast as any young city in the western United States, and its property rests on a sound and healthy basis.

Among the many interesting features worthy of study presented by the Brazilian capital which claimed Mr. Roosevelt's attention was the problem of dealing with the poorer classes. In considering this phase of the city's life he writes:

The condition of the poorer people, for example, is, I am assured, and as I thoroughly believe, far removed from the misery of the slum dwellers in the great cities of the Northern Hemisphere. There is no especial quarter for the poor, nothing in the nature of a slum district, and there is much effort of one kind and another to provide decent living conditions for the poorest. The manifestations of this effort vary from those which one would associate rather with the Brazil of a century back up to those which are characteristic of the most advanced modern capitals, a not unnatural contrast in a city where the thronging automobiles and trolley cars still have to exercise a good deal of care in connection with oxcarts. Thus in one place we saw a free fountain, a long stone building with some 20 or 30 taps coming out of it, from which water is obtained by the poor people who live on the hillside above in the little shanties built by themselves on land loaned them almost rent free for the purpose by a religious order. In other places we saw excellent houses which had been put up by the municipality itself for workingmen. In other instances it was the workingmen's organizations which had put up these houses for their own members. In yet other cases, perhaps the most numerous of all, it was the factory owners themselves who had built the houses in order that their operatives might be well lodged.

That Col. Roosevelt was pleased with the spirit of cordiality in which he was received by the Brazilian people goes without saying, and the following excerpts from his second article partially summarize his impressions as to their chief characteristics, the culture and refinement of the leading men, and the patriotism and high ideals which they hold in common with the best people of the United States:

It is often said that in order that we of the United States may understand and get on with our neighbors to the south of us we must realize that there is a fundamental

difference between us and them in ideals and habits of thought and ways of life. Doubtless this is true to a degree. Every nation has its own special peculiarities and special points of differences from even the most closely allied of other nations. But I must confess that in my brief stay in South America so far what has most vividly and deeply impressed me has been, not the points of difference, but the points of unity with my hosts. As soon as we got below mere conversational banalities we were almost certain to strike matters of real consequence at which they and I looked from the same standpoint. I certainly felt very much at home with my hosts, and they were courteous enough to act as if they felt at home with me. They were as energetically and intelligently interested in business development as our own people. They were as much interested in governmental efficiency and honesty. They were as patriotic and as proud of their country.

I was greatly struck by the ability and cultivation of most of the men whom I met who are leaders in public life and in the other activities of the community. I was also struck by the fact that in so many of the essentials—the "fundamentals," as Cromwell would have called them—their ideals were the same as those of our best men at home. For example, they are quite as alive as we are to the need of developing a genuine patriotism. They realize that no man can be of any use in the world if for this patriotism he substitutes a washy internationalism. One phase of this patriotic thought is full appreciation of the fact that any man who seeks to give artistic or literary expression to achievement can do it with most efficiency if he works in accordance with his own national ideals and, by preference, in his own country. The men who best expressed the new spirit in Brazil showed a cordial desire to see Brazil learn from foreign countries, together with a no less determined purpose that everything brought in should be, not copied, but changed and adapted to meet the genius of the Brazilian people and the peculiar needs of Brazil itself. They felt that mere copying of foreign models rarely amounted to much, although the study of foreign models for adaptation and inspiration is often indispensable.

Relative to the democratic spirit of the people of Brazil he writes:

A traveler passing hastily through a country, even though, as in my case, he has unusual opportunities for observation, can do little more than record his impressions. Yet these impressions sometimes have a value of their own. I was assured on every hand that Brazil is a real democracy. There is universal suffrage, and the people as a whole take a keen and intelligent interest in the working of their Government. Moreover, it certainly seems that they are less apt to be misled than portions of our own electorate by appeals made in the name of democracy which really have nothing whatever to do with democracy.

The following is the striking paragraph with which Col. Roosevelt concludes his second article:

Brazil is throbbing with the energy of a new life. The only possible threat to this new life and to the immense progress accompanying it would come from disorder and turbulence—that is, from any outbreak either of revolutionary or separatist activities. I do not believe that there will be such turbulence or disorder. If there is not, the immense territory, much of it virgin and of extraordinary fruitfulness, which lies within the boundaries of Brazil will witness a literally astounding development during the next two or three score years. Unless all signs fail, the twentieth century will be the century of the growth of South America.

Through the Heart of the Surinam Jungle, by Charles Wellington Furlong, in Harper's Magazine for February, 1914, is an interesting story of a trip through a section of northern Dutch Guiana. The journey started at Albina, on the Maroni River, thence down this

stream to the mouth of a small tributary called Wana Creek, up this creek to the divide, or watershed, and on into the Coermotibo River. From this stream the party emerged into the upper Cottica River, where the author stopped at the plantation of Dr. Bradley, formerly United States consul. The journey from there into the Commewijne and up the Suriname to Parimaribo is not described in this article.

The chief interest of the story centers in the "Bosch Negers" (Bush Negroes), whose physical and mental characteristics, customs, and modes of life are described in Mr. Furlong's usual entertaining style, while added zest is given by the introduction of personal incidents and happenings of a more or less dangerous nature, the narration of which, while not in a boastful spirit, serves to show the nerve and temerity of the explorer. Mr. Furlong's extensive wanderings in the South American continent from the countries of the Caribbean down even to the "tip o' the Horn," from the forests of the Tropics to the dreary ice-covered wastes of Tierra del Fuego, have so inured him to hardship and danger that these features are invariably touched upon just enough to give spice to his stories.

Ignoring the warnings as to dangers from fevers, forest, escaped déportés (French convicts), Caribs, and the Bosch Negers, the author started from Cayenne, French Guiana, as follows:

The cattle boat *Fagersand* dropped me at St. Laurent, a French Guianan penal settlement up the Maroni River, where I crossed its broad swirl of muddy currents to Albina, a little Dutch frontier post backed against the forest jungle. A few Dutch soldiers, officials, and merchants comprise the white element: the others are coolies, Guianan negroes, some Bosch, and a few Amerinds who come in to trade. * * *

These Bosch date from the "sugar age," 1660 and 1840, which saw the greatest importations, mainly by the Dutch, of Gold Coast slaves into South Carolina, the West Indies, and the Guianas. The Dutch were hard taskmasters, so came revolts, and from 1775 there was almost unending warfare. In the Guianas these blacks found a habitat similar to their African wilderness, and so carried on the same primitive life as their forefathers, in a retreat from which, but for the help of the Caribs, they would have driven the planters into the sea.

To-day we find a great Bosch confederation of at least 7,000 untamed Africans. Every village has its representative, each of the four leading districts electing a chief. Their ruler, called gramon (grand man), is at present a diplomatic old Bosch named Osayisay. The Bosch are polygamous, so, to insure hereditary chieftainship, the oldest son of the gramon's oldest sister succeeds him. There are three principal tribes: The Saramacea, Becoe (Becoo), and Djoeka (Djooka); the last inhabits the Maroni, Coermotibo, and upper Cottica Rivers.

The Bosch are magnificent specimens of physical manhood. To the numerous queues of their braided hair are often attached nickel bicycle clips, and to their ears rings of gold. Gaudy-colored breechcloths "made in Germany" are practically their only clothing. They are pagans, and worship the cotton tree to propitiate a bad spirit. Obeah is the name they give to anything about which they may be superstitious, applying it to all evil influences, to their fetishes or charms in general; many resented my camera as a bad obeah.

Their language, called taki-taki (talk-talk), is a most remarkable linguistic compound of their original Cromanti coast dialects, with a good measure of Pidgin-English and Dutch, and spiced with a few derivatives from French and Spanish.

At Albina, with the assistance of a Dutch merchant, the author secured two Djoekas and an older Saramacca named Wandu, who were to serve as guides and crew. These were subsequently supplemented by two other Bosch negroes, thus increasing the expedition to a total of six men, in two canoes. Everything being ready—

By sunrise we were in a thick forest waterway, so narrow and winding that it required the most skillful maneuvering with pole and paddles, for a bad hole from a root or stump would quickly sink a canoe.

Careful diet, boiled water, a selected medicine kit, protection from heat and sun by a tropical helmet and woolen cholera belt, and from mosquitoes and night chills by nettings, are prime requisites. To make and break camp early was my custom, so before sunset water was boiled for 30 minutes and another half hour usually found us in our hammocks. Before dawn we were on our way, under the steady, rhythmic swing of the Bosch, their muscles rippling under their sleek, scarified bodies; armlets glinting to the lift of the gleaming paddles, which sometimes showered me with spray. Over the broad leaves of the tropical water lily, fringing the sides, the chay-maka, a small spinous palm, lipped the water. High overhead vines twisted in snaky clusters, the brown fruits of the pantah hung on Damoclean threads, and overtowering all rose giant rubber trees, grignon, and palms. Bats dodged among the deep shades, translucent carmine dragon flies darted, and iridescent blue butterflies flitted in the occasional glints of sunlight. The water extends among the trees so that often no solid banks are seen for many miles in this Amazonian lair, where man must ever guard against insidious dangers, where nature drips and exudes death and beauty in the same vapid breath, and life breeds in overpowering luxuriance side by side with wonderful processes of decay.

Among the many unusual experiences which served to vary the monotony of the journey, some of which may also serve to give the reader a somewhat "creepy" feeling, may be mentioned the following:

The few raised points of land along the Coermotibo and upper Cottica Rivers were usually Bosch and Carib village sites, where the chiefs generally invited us to stay overnight. Notified of my arrival, the chief would come down and greet me. Then he would be presented with tobacco leaves. After mixing these with river water in a calabash, he would squeeze the extract into his hand and snuff the concoction up his nose—a few sniffs and blows, and he would escort me to a palm-thatched hoso (house) assigned us.

We stopped at one of twin villages on the Coermotibo on two high knolls of ground, separated by a jungled ravine. At twilight the chief, my host, came with Otayah, who explained that I should pay my respects also to the chief of the neighboring village, lest he be offended. So, as the afterglow changed to dusk, we passed through the ravine to the village center, where the chief and a group of Djoekas were assembled. There was barely light enough to distinguish his features.

"O-fa-yoo-day?" ("How do you do?"), and, stepping forward, I gripped his outstretched hand, so soft, pudgy, and lifeless that my gaze involuntarily dropped to his arm, spotted and mottled. I had shaken hands with a leper.

Immediately following this rather grawsome paragraph we are given a beautiful pen picture of a tropical night:

Shortly after midnight we were again gliding down the Coermotibo—cool, mysterious, blue-green, silver selvaged. Around me sounds as mysterious and illusive as the tropical darkness; beneath me the fathomless river; above, a clear, star-sown sky,

the cross blazoning the southern heavens as it mounted upward. Such was a night in the Guiana Tropics with nature asleep but dreaming; then the dawn flush, sunrise, and nature awakening to the long, sizzling heat of day.

Altogether the story gives the reader a variety of sensations, and that in Mr. Furlong's most entertaining and inimitable style.

Oil on Troubled Waters, in the Illustrated London News for October 28, 1913, is a pictorial description of unusual interest dealing with the method of calming stormy seas and violent waters by pouring oil upon them in order to enable safer navigation and to render less hazardous the task of assisting distressed vessels. The subject is of particular timeliness because of the efforts which the appropriate legislative bodies of the United States and other countries are exerting to establish uniform maritime laws imposing requirements and restrictions which would tend to diminish the rather unusual number of maritime disasters which have shocked the world during the past few years.

The article deals with the valuable aid which the oil-tank steamer *Narragansett* rendered to the distressed *Volturno*, the steamship which was recently endangered by conflagration in mid-ocean. It was by pouring oil on the raging waters that the rescue of passengers and crew was made possible. The wonderful effect that a small amount of oil has on wave motion is surprising. It is very little realized that a drop of oil will spread itself over 7 square feet of water, and 9 pints of oil are sufficient to cover a square mile of sea surface, forming a film which will prevent the water from breaking. This film is effective in keeping the water quiet when it has the almost unimaginable thickness or rather thinness of one fifty-millionth of an inch.

Various points from the British Board of Trade's Notices to Mariners are then quoted as follows:

On free waves—that is, waves in deep water—the effect is greatest. In a surf, or waves breaking on a bar, where a mass of liquid is in actual motion in shallow water, the effect of the oil is uncertain, as nothing can prevent the larger waves from breaking under such circumstances; but even here it is of some service. The heaviest and thickest oils are most effectual. * * * All animal and vegetable oils, such as waste oil from the engines, have very great effect. * * * The best method of application in a ship at sea appears to be: Hanging over the side, in such a manner as to be in the water, small canvas bags, capable of holding from 1 to 2 gallons of oil, such bags being pricked with a sail needle to facilitate the leakage of the oil. * * * For boarding a wreck, it is recommended to pour oil overboard to windward of her before going alongside.

. The use of oil was well known to the ancients. The officers of Pliny's fleet knew it eighteen hundred years ago.

The various methods of applying oil on turbulent waters are exemplified in the illustration accompanying this article. The picture marked "1" shows how small canvas bags, each containing from 1 to 2 gallons of oil, hang over the side of a ship so as to be in the water.

The bags are perforated with a sail needle, thus allowing the oil to slowly trickle out and spread the film over the sea as the vessel proceeds on its way. Illustration 2 demonstrates another method of applying the oil as used by the islanders of St. Kilda in Scotland. The people there make puddings of the fat from sea fowl and fasten them astern of their cables to prevent the waves from breaking. The third illustration shows an Eskimo sailing over heavy waters and pouring oil to smooth a path for his canoe. Picture 4 shows the type of canvas bag generally used for containing the oil. When used as in the first picture the bag is perforated. Picture 5 shows one of the most interesting ways of smoothing the waters for some distance by firing projectiles filled with oil. This firing method is mainly used to enable a vessel to make a smooth way for herself in crossing the bar of a harbor or the entrance of a river where the waves break violently. The oil projectiles, shown in the sixth illustration, are made with a little shield on top which protects the oil opening from the air until it strikes the water. As soon as it reaches the water the oil flows out from the opening. The seventh and eighth pictures show the spread of film which a single drop of oil will make on water. The ninth picture is that of a buoy (shown partly in section) which is also used for discharging oil on the surface of the water in which it floats. The buoy contains an oil tank and a valve on each side; these valves, connected by chain from the shore, are made to open and close at will, thus regulating the spread of oil. The buoys may be anchored at any desired spot.

The Economic Future of the West Coast of South America is the title of an address delivered by Prof. Hiram Bingham, of Yale University, before the American Manufacturers' Export Association, at the White-hall Club, New York, January 21, 1914, which appears in the Bulletin of the association issued February 1, 1914.

In his very able presentation of the economic features of the west coast Prof. Bingham gives a characteristically conservative analysis of the present and future commercial conditions of this section of the South American Continent. His prognostications may be somewhat at variance with those of the most enthusiastic and optimistic prophets relative to the commercial development incident to the opening of the Panama Canal, but his note of warning is being sounded on the side of safety and conservatism, elements that are not to be lost sight of in business matters.

According to Prof. Bingham the economic future of the west coast depends (1) on its geographical and geological character; (2) on its ethnological condition; and (3) on the psychological results of the opening of the Panama Canal.

In regard to the first conditions he points out the great impediment to commercial development offered by the natural barrier along

almost the entire coast by the Andes Mountains, and contrasts the topographical advantages of the east coast as follows:

Now, if you will look at that map carefully you will see that it looks as though nature had erected a great Chinese wall up and down the west coast. For nearly 2,500 miles there isn't a place in that wall that is less than 10,000 feet above sea level. It is not fair to say that the opening of the Panama Canal will not affect the height of this mountain barrier, for anything which cheapens transportation will make it easier to bring in the steel rails and locomotives which can climb this barrier and reach the central and eastern part of South America. At the same time it must not be forgotten that owing to the lack of any such barrier on the east coast, and owing to the existence of navigable rivers like the Amazon, the Madeira, and the Rio de la Plata, the valuable central and eastern plains of South America are far more accessible from the Atlantic than they ever will be from the Pacific.

After dwelling on the further disadvantages of the desert areas of Chile, the tropical jungles of the western portion of Colombia, the cold regions of southern Chile, all added to the Andean wall and forming obstacles to the agricultural and pastoral development of this section, he turns to the brighter side of the prospect and gives us his views as to what may really be expected to happen to the future development of these extensive areas:

Now, then, keeping clearly in mind the actual geographical conditions of the west coast, the long desert on the seaboard, the high dry plateau back of it, and the lofty chain of mountains rendering transportation extremely difficult and excessively expensive, let us attempt to estimate just what economic basis the future development of the west coast must depend upon. First and foremost comes mineral wealth. If there is enough mineral wealth, it can overcome untold difficulties of transportation. It does not need rainfall or vegetation; it merely requires a market. Mineral wealth is the strong point of the west coast. The very aridity of the northern Chilean Desert is the cause of Chile's great wealth of nitrates. The exploitation of the nitrate fields by English and other foreign capitalists and by the Chilean capitalists themselves has gone on apace during the past 25 years. The necessary railroads and port works have been constructed, labor has been introduced, refining plants have been built, and the only clouds on the horizon are, first, the fact that there must be a definite limit to the amount of nitrate that can be profitably extracted and, second, the recent successful extraction of the nitrates from the nitrogen in the atmosphere.

The length of the ocean voyage from the nitrate fields to the agricultural fields of Germany, one of the best customers for Chilean nitrates, will be shortened about 3,000 miles by the opening of the canal. This will cheapen the cost of nitrate in Germany and thereby benefit the European farmer, if the canal tolls do not offset this to a great extent. Similarly, it ought to cheapen the cost of fertilizers to our western farmers, who will undoubtedly import nitrate through the port of New Orleans. Eventually, it seems as though this might be of great benefit to agriculture in the United States, and, by increasing the demand, of considerable benefit to the Chileans. The outlook here is decidedly promising. The question as to the limits of production of the somewhat restricted Chilean nitrate field need not concern us here or at this time, for there seems to be plenty of nitrate for at least 50 or 100 years to come.

Unquestionably the agriculturists of the Mississippi Valley ought to be prepared to take advantage of the cheapening in the cost of nitrates which must follow the opening of the canal. It is common talk that we in this country lag very far behind Europe in our knowledge of intensive cultivation and scientific agriculture. With our broad and fertile prairies, we have not had to practice such careful husbandry as the European farmers. This is one of the causes of the high cost of living. There is

no doubt that the time is coming when we will learn the advantage of making our soil produce as much as it possibly can.

The sugar planters of Louisiana, who believe that they face ruin in the prospect of free sugar, have yet to test the result of using Chilean nitrates. It may be that with the cheapening of this product in the port of New Orleans it will be possible for the Louisiana planter so to increase the yield of his fields that he will be better off than in the old days of protected sugar. It is well known that the most profitable sugar plantations on the Hawaiian Islands have long used scientifically made fertilizers in keeping the production of their sugar-cane fields up to the maximum.

The guano of the Peruvian islands comes under the same head. The chief difficulty here is that, owing to the very limited quantity of this product and the need for it in Peruvian agriculture, it does not seem likely to prove a large factor in future development. * * *

Next to nitrates probably comes copper. The world-wide increase in the use of electricity seems to be creating a steadily increasing market for this metal. There are enormous copper deposits in Peru and Chile. Probably the best known in this country are the mines of Cerro de Pasco and of the Braden Copper Co. Stories of extraordinary new finds are continually coming in. Contradictory reports concerning the future development of very extensive projects, one of them necessitating the building of a \$10,000,000 railway in order to connect one of these copper deposits with the seacoast, are current in the South American trade journals. With the shortened water transportation undoubtedly an increased amount of copper will be brought from the west coast to the United States. As long as copper is as valuable as it is at present, about \$330 a ton, it will be worth while to pay the Panama Canal tolls. Whether the increased output of copper, which will be encouraged by the greater ease of transport, will seriously affect the price in this country is a matter of dispute. On the other hand, there is no doubt that the money spent in west coast mines for the wages of miners will increase the purchasing power of the people of the west coast.

Next to copper in importance from the mineral standpoint comes the tin of Bolivia, which must find its outlet either in the ports of the west coast or through the railways of Argentina. It was the original intention of both the Argentine and Bolivian Governments to build a railway south from Potosi, so that this most important tin-producing region would find its outlet on the Rio de la Plata rather than on the Pacific Ocean. But the actual railroad which has been constructed from Oruro to Potosi makes it more probable that this tin will come out by way of Antofagasta. Here again is the basis for increased prosperity in Bolivia and for cheaper tin for American manufacturers. * * *

Finally, there is the question of petroleum. Within the past few years profitable oil wells have been found in northern Peru. Within the last few months word has come of the intention of British capitalists to invest a large amount of money in the oil fields of Ecuador. The opening of the canal will enable the west coast to find a nearer market.

Regarding the agricultural development of the west coast, Prof. Bingham is not so optimistic. He recognizes, however, the potential factor of irrigation in this connection and concedes that the production of cotton and sugar is capable of considerable expansion.

In dealing with the ethnographic phase of the question of commercial development of the west coast the Professor emphasizes the fact that a majority of the people of the Andes regions are natives of a plain and unassuming character. Hence it will be necessary for our exporters to study their wants and necessities as well as their peculiar characteristics in attempting to expand the trade with this section.

The psychological aspect of the opening of the Panama Canal is then most interestingly dealt with, both as to its effects on the optimistic people of the west coast countries and on the business interests of the United States. Caution is enjoined upon all and wild speculation based upon optimistic hopes of immediate results is warned against. He concludes as follows:

Now, I have been "knocking" a great deal to-day, because it is necessary to meet and overcome a great deal of "boosting" that has been going on. The west coast has a great future. There are great mines there. In fact, I have heard of two or three mines of copper where there are more than \$10,000,000 worth of copper in sight. The great problem is how to build a railroad to transport that material. Therefore there is going to be a market for machinery, for railroad material, structural steel, and allied products, but I want to warn you that it is not going to be anything like that on the east coast. * * *

After the canal is opened you are going to get fine passenger steamers going direct from New York to the west coast. As a result, I firmly believe there is going to be a tremendous increase in passenger traffic to South America, and in the wake of that passenger traffic there is going to go a large amount of business as the business men see opportunities which they do not realize exist for them there to-day.

The story of the Para Congress, by a special correspondent, in the India Rubber World, is an interesting account of the meeting of the Congress for the Economic Defense of the Amazons, which was recently held at Para, Brazil.

Among the distinguished speakers who addressed the congress in addition to the governor of the State of Para, were Dr. Bento Miranda; Dr. Augusto Borborema, president of the Senate; Mr. J. Ferreira Teixeira, president of the congress; Mr. J. Simão da Costa, representing the ministry of agriculture, and others. The address of Mr. da Costa, delivered at the second session, is quoted in extenso by the correspondent, and was replete with valuable suggestions and sage advice as to the future agricultural and economic development of the Republic. Among his many striking utterances noted in the article the following are of exceptional interest:

In opening his speech Mr. da Costa said that he thought that James Bryce had been harsh and unjust as to the characteristics of the Brazilian race; but in one respect he was right, in the matter of agriculture. As regards this valuable industry, Brazilians can not deny that they have preferred words, words and words and after-dinner rhetoric to practical deeds. But there could be no agriculture where there were no agriculturists. The need for agricultural training was immediate and pressing, as modern agriculture and cattle farming were no longer the avocations of ignorant peasants, but the noble professions of highly trained scientific men. The immense tracts of forest in the Amazons were useless and an encumbrance and only served as a hive for the reproduction of nomadic tribes until the valuable trees were utilized and the useless ones displaced by trees of recognized economic value.

It was therefore necessary that they should imitate the United States of America and create as great a number of agricultural training institutions as their means could afford. * * *

Capital was also a powerful factor in the future development of agriculture and other industries and it behooved Brazilians of every social sphere to take to heart the necessity and obligation on their part to respect and defend all such as may bring

capital into the country as jealously, as courteously, and as gallantly as they would act toward a guest in their own house. It is impossible to find a more hospitable nation on earth and one where hospitality is more naturally and heartily dispensed. A people who possess this inborn virtue should have no difficulty in making respect for the law and for foreign capital and capitalists a matter of national pride.

Mr. da Costa's speech teemed with practical suggestions, and he dwelt upon the immense economic value of many possible products for Brazil, especially as to fruit culture, as Brazil grows magnificent bananas, oranges, and pineapples, and could develop a trade of many millions in a short period if it would only adopt such measures as will attract capital and labor to carry on the industry.

During the congress the delegates paid visits to the Museu Goeldi, where experiments in the coagulation of rubber latex on a revolving drum, after the method evolved by Wickham, were being carried on; to the agricultural colony of São Joā do Prata, where some primitive Indians were being instructed and their children educated; to the Eremita rubber plantation and rice factory; to the experimental station of the State of Pará, where Dr. J. Ferreira Teixeira delivered a lecture on the economic value of machinery and modern implements in the exploitation of the agricultural industry; and finally to the plantation of the Mojú Rubber Plantations & Improvement Co. (Ltd.), where the visitors were astonished at the large area which had been cleared and planted in rubber and cocoa trees in an incredibly short time. The lands, too, seemed to yield rice in such abundance that all the optimistic expectations of the management had been exceeded, and their chief problem now is how to prepare such a quantity for the market.

González Gamarra, Artista, is the title of an appreciation in the January 3, 1914, issue of Variedades of Lima, Peru, written by Mr. José Galvez, a distinguished Peruvian poet, of the remarkable work of that young Peruvian artist and cartoonist. For the benefit of THE BULLETIN's readers one of the artist's drawings is herewith reproduced. From this example some idea may be had of the wonderful precision, wealth of detail, and forceful presentation of his subjects by this talented young Peruvian, whose artistic vision reveals beauties hidden from the casual observer. Sr. Gamarra's fame as a cartoonist is more than national, and the genial humor of his caricatures has made him so popular in this line of work that his genius in the higher realms of art has scarcely received the attention it deserves.

In this connection Sr. Galvez writes:

For many González Gamarra is a magnificent master of fun, a distinguished caricaturist, a product of the national artistic humor, prolific in juvenile types that depict a character in a marvelous manner, catching a gesture, and laughing good naturedly at humanity. But there is much more. González Gamarra is an artist in

the noblest and fullest sense of the word, a true lover of the beautiful to whom beauty has granted the precious gift of its expression. His sketches taken from life acquire that artistic exactness which ennobles whatever it touches. The angles which show to our eyes come from his privileged hands touched with the charm of illusion, and even the accustomed places we see daily without noting acquire through the work of the artist a new worth in beauty which makes them admirable.

In addition to his talents as an artist and cartoonist, Sr. Gamarra has been endowed with the genius of the musician and composer, enjoying the reputation of being a piano virtuoso of marked ability. He is also an enthusiastic student of letters, and is soon to be given the doctor's degree. Altogether this young man seems to be a fine product of Peru's artistic and intellectual progress.

The British Guiana Railway Project, by Sir Walter Egerton, in the December issue of the Canada-West India Magazine (Montreal), is a descriptive story of "an epoch-making journey" by the governor of British Guiana. The expedition was absent in the wilds just two months, but it penetrated many sections hitherto unknown to the white man, and the governor saw great opportunities for railway construction and future traffic, all of which have been embodied in a lengthy report on the subject.

The Rubber Situation in Brazil, in the January 1 number of the India Rubber World (New York), is an account of conditions in the Amazon country, written by an American who has just returned from a year's stay in the Madeira-Mamore region. A rubber commission, composed mostly of Englishmen, has been investigating the gathering of rubber with a view of establishing more modern methods of exploitation. It is thought that by this means the depression in rubber prices, which have not been as satisfactory as formerly, may be overcome.

Cooperative Movement in Argentine Agriculture is a subject occupying several pages of the January Monthly Bulletin of Economic and Social Intelligence (Rome). Many interesting topics are touched upon, such as the high cost of living, European agricultural conditions, immigrant colonists, etc., and other allied subjects.

La Industria Azucarera de Cana en el Peru, by Eduardo Higginson, in the January issue of El Mundo Azucarero of New Orleans, treats of the sugar cane industry in Peru and its great possibilities for further development.

The Castor-Oil Tree, in the October number of Paraguay (Asuncion), is the subject of a short descriptive article on this necessary vegetable product. Paraguay produces this tree, and the article tells of the many varieties and methods of cultivation.

Gold Placers of Colombia, in the January number of the Mexican Mining Journal (Mexico City), describes this work and tells of labor conditions. Hydraulic mining, according to the article, is a thing of

the past and the future lies in dredging, which has an extremely bright outlook.

Southeastern Brazil as a Touring Ground, in January Motor Life (New York), is an interesting illustrated article dealing with Brazilian motor conditions and prospects. Although highways are in most cases very inferior, great improvement is noted; in the coffee district centering around Sao Paulo the plantation owner is buying motor vehicles and road conditions are being improved.

Land of the Montezumas, by Marc F. Valette, in the October number of the American Catholic Quarterly Review (Philadelphia), tells of the ancient Mexicans and the wonderful works that still remain to indicate the constructive skill of those peoples.

Theodore Roosevelt, in La Reforma, of Buenos Aires, forms the subject of a biographical sketch of the American statesman, which first appeared in La Nacion, one of Argentina's great dailies. This is followed by a translation of Mr. Roosevelt's address on Democracy, which was largely copied in South American journals.

The Prevention of Malaria, by Malcolm Watson, M. D., in the December number of the United Empire (London), is an important medical paper read at a meeting of the Royal Colonial Institute. Dr. Watson discusses the relationship of malaria to agriculture and presents many interesting facts about this disease which has so many victims in tropical countries.

Country Life in Cuba, by H. A. van Hermann, in the December issue of Modern Cuba (Habana), is an interesting article descriptive of the writer's visit to one of the most beautiful country homes in Cuba. Several pages of exterior and interior views cause the reader to pause and consider the possibilities of life and business in a land beginning to attract world-wide attention.

The Caribbean Tropics, by Julius Muller, in the January Century, is an article based on the writer's observations in Cuba, etc., and in which he sees wonderful opportunities for the capitalist, but believes that reforms must be brought about before the poor man from foreign climes can successfully establish himself in the Tropics.

Tramping Across Panama, by George B. Thayer, in the January Mid-Pacific Magazine (Honolulu), tells of the author's experiences in the Canal Zone, and is one of the few articles that are appearing in publications of the Hawaiian Islands in connection with our great work at Panama.

Prospecting Conditions in Peru, by Charles S. Haley and C. A. Rodegerdts, in the December 20 issue of the Mining and Scientific Press (San Francisco), is the second installment of the practical experiences of these two mining men in the Peruvian Andes.

PAN AMERICAN NOTES

A NEGLECTED VIEWPOINT.

THAT the opening of the Panama Canal is aiding in the awakening of the commercial interests of the United States to new opportunities is shown by the frequency of press announcements relative to excursions of manufacturers and business organizations to Latin America. Accounts of these seem invariably to indicate that the animus of these quasi business journeys is to find new customers for the manufactured products of the United States. This spirit may be well enough as far as it goes, but it covers only one-half of the ground. Just as important—and in its last analysis perhaps more important—in the development of commerce between the United States and her southern neighbors is the question: What can the United States *buy* from Latin America? It would appear that the economic fact that a people must have something to *sell* and must be able to sell it before they can be buyers is often lost sight of, as is the correlated fact that trade is reciprocal and consists largely of an *exchange* of products either direct or indirect. Again, the fact that the *buying* of needed natural products to advantage is often just as valuable an asset in a nation's prosperity as is *selling* to advantage is frequently lost sight of. As an instance, if the United States buys \$10,000,000 worth of Chile's nitrate, enriches her soil, and by means of this added fertility produces a correspondingly larger crop of cotton, corn, and wheat, she is the gainer by this trade; and that, perhaps, in a greater degree than when the farmers of the Southern States sell \$100,000,000 worth of raw cotton to Great Britain. If she buys \$1,000,000 worth of ivory nuts from Ecuador and subsequently manufactures from them \$2,000,000 worth of buttons, has she not gained by the trade? Every pound of crude rubber she buys from Brazil and makes into automobile tires is a gain, every pound of copper that comes from a Peruvian mine and is made into telephone wire is a gain, every sack of cacao beans imported from South or Central America and made into cakes of chocolate is a gain—in other words, the purchases from Latin America are perhaps just as important as the sales to these countries. Added to this, however, is another important factor. When the United States buys the products of these countries she enriches the people who live there by just that much, and by just that much she enlarges their purchasing power for the manufactured products she desires to sell them. Other things being equal, people will buy from those who buy from them. These are all very elementary economic truths; but is it not about time that those from the United States who visit the South and Central Americans ask themselves: What can we *buy* from them?

THE NINTH INTERNATIONAL CONGRESS OF STUDENTS.

Preliminary work of an active character is now going on in preparation for the Ninth International Congress of Students which is to be held at Montevideo, Uruguay, in 1915. As it is the first time that this international student congress will meet in South America, particular stress is placed on the desirability of large representations from all the countries of South America as well as from those of Central America and from the United States. The organization committee acting in cooperation with the central committee are in close touch with the student organizations of the world so that the opening of the ninth congress should witness a remarkable gathering of an international character. The approaching congress at Montevideo is, moreover, a matter of special pride to the Americas. First, it was the congress held in the United States of America (Cornell University, August-September, 1913) which had the pleasure of naming South America, for the first time, as the seat of the sessions; and, secondly, it is stated that the various other countries of South America, as well as Uruguay, will welcome the opportunity to extend hospitality to the student delegates as they pass from place to place during the study tour which will be arranged in conjunction with the congress. In this connection it is fitting to point out that at the annual convention of the Association of Cosmopolitan Clubs of North America, held in December, 1913, at Iowa City, Iowa, it was voted to organize a special delegation to attend the Fourth International Congress of American Students which will assemble at Santiago, Chile, September 10-20, 1914. Further information concerning these student gatherings may be obtained by addressing the Pan American Union which has on file the names of the various organizing committees as well as the members of the central committee.

COLOMBIA HONORS THE MEMORY OF ALEXANDER MACAULAY.

The Republic of Colombia honored the memory of a foreigner on January 26, 1914. The generous tribute paid to the valor of a North American by this Latin American nation is characteristic of a people who still believe in fine sentiment and in gratitude. The name of the hero who died for Colombia 100 years ago, and whose memory is still cherished and kept alive by a grateful people, is perhaps but little known in the United States. The citizens of Popayan and the Colombian nation as a whole, however, cling to it with veneration, as is evidenced by this national tribute upon the occasion of the one hundredth anniversary of his death. Alexander Macaulay was a New York youth whose soul had been fired by the spirit of liberty, and hearing of the heroic struggles of the South American patriots

to win their independence he took ship for Maracaibo to offer his sword and his services. En route to Quito he stopped most opportunely at Popayan while that little city was being besieged and threatened with destruction by the Spanish governor of that municipality at the head of a cavalry force of about 1,500. Organizing the defenders, young Macaulay, at the head of a small force of about 400 patriots, took the initiative and surprised the royalists by a sudden attack, routed them completely, and saved the city. The victorious little band then marched against the rest of the enemy who occupied a bridge over the Cauca River, and were again successful. These battles occurred in April, 1811. Macaulay threw himself into the struggle and continued fighting for Colombian freedom until he, in company with Dr. Joaquin Caicedo and several others, was captured and executed by order of the royalist leader, Don Toribio Montes, on January 26, 1814. It is for this reason that the Colombians have held the name of Alexander Macaulay in reverence for 100 years and have added it to the long list of heroes whose deeds have illumined the pages of their history.

DEVELOPMENT OF EDUCATIONAL RELATIONS.

It is gratifying to note that the efforts of the Pan American Union to develop closer intellectual and social relations between the people of the United States and those of the other American republics are being seconded and supplemented by such organizations as the Carnegie Endowment for International Peace and the American Association for International Conciliation. Following the recent visit of Hon. Robert Bacon to many of the capitals of South America, under the auspices of the Carnegie endowment, the latter organization is now considering plans for inviting to the United States representative scholars and men of affairs from the southern continent. Such meetings of the prominent educators of the several nations can not but result in a closer and more effective knowledge of each other's country and civilization, and these are perhaps the most dominant factors in promoting better understanding and international peace.

TEACHERS TO TOUR SOUTH AMERICA.

In line with the same commendable purposes of bringing about an interchange of prominent educators between the United States and the countries of Latin America, the American Association for International Conciliation has launched a plan which is worthy of mention. It is organizing, under its auspices, a study tour of South America for teachers, both men and women. It is planned that the

party leave New York about the last of June and return to New York in time for the opening of schools in the fall. In this way the teachers may become acquainted with the teachers of the schools in the countries visited, the school systems, and may also obtain a more accurate, intimate, and broader knowledge of the countries and peoples concerning which they teach. It is also to be hoped that similar expeditions may be formed in South America to pay corresponding visits to the schools of the United States.

INCREASED STUDY OF LATIN AMERICAN HISTORY.

In former issues of the **MONTHLY BULLETIN** reference has been made to the increasing interest in the study of Latin American history and development in leading colleges and universities of the United States. Recently the Pan American Union has received a communication from Dr. P. A. Martin, assistant professor of history at Leland Stanford Junior University, California, in which he speaks particularly of this growing interest at that institution. The entire subject, writes Prof. Martin, is covered in a general course extending throughout the year. In this survey special emphasis is placed on the Spanish and Portuguese colonial period, the history and social evolution of the leading Latin American nations in the nineteenth century, and, finally, a somewhat detailed discussion of the present day political and economic conditions in those countries. Another special course is that on the history of Brazil in which extensive use is made of the collection of *Braziliiana* recently presented to the university library by its president, Dr. John C. Branner.

THE CHRIST OF THE ANDES AT THE HAGUE.

Among the many interesting objects of art and decoration sent by various countries to ornament the Peace Palace at The Hague perhaps none is more significant than the gift of the Universal Peace Association of Argentina. This took the form of a reproduction in bronze, on a smaller scale, of the celebrated "Christ of the Andes" statue, which stands in heroic size on the crest of the Andes, marking the boundary line between the countries of Argentina and Chile. Made from the molten metal of cannon which had been used in the war between the two countries, this great statue of the Christ sealed the pact of eternal peace between them, bearing on its pedestal the inscription:

Sooner shall these mountains crumble into dust than the people of Argentina and Chile break the peace which they have sworn to maintain at the feet of Christ the Redeemer.

Particularly appropriate was the presence at this presentation of Señora Oliveira de Costa, to whose efforts the successful movement for the erection of the original statue on the Andes was largely due. It is thus to a peace organization of Latin America that the Carnegie Palace of Peace at The Hague owes its most significant and perhaps most appropriate ornament.

ANNUAL MEETING OF THE CHAMBER OF COMMERCE OF THE UNITED STATES OF AMERICA.

The second annual meeting of the Chamber of Commerce of the United States of America was held at Washington, D. C., in the New Willard Hotel, and the Pan American Union building, February 11-13, 1914. Although in existence only two years, this organization has become one of importance, and embraces in its membership notable business and professional men, economists, and university educators from all sections of the country. Their deliberations are therefore given careful consideration since they express the thought of men of affairs from all over the United States. The sessions this year were devoted mainly to the discussion of problems which are engaging the serious attention of the legislators of this country, with little opportunity afforded for consideration of international questions. Among the chief topics considered were those pertaining to industrial combinations and trusts, railways and their valuation, banking and currency, and other questions of a similar nature.

SALVADOREAN STUDENTS IN THE UNITED STATES.

While it is generally conceded that educational institutions are annually attracting a growing number of students from the countries of Latin America, yet no accurate census is available which would show the exact number of students and the countries represented. That such a compilation would reveal some interesting facts is the opinion which must be drawn from a single list which has just been compiled by Sr. Don José Alfaro Morán, the consul of Salvador in New York, showing the number of students from that country who are studying in schools and colleges in the Eastern States alone of the United States. No less than 38 names appear, and these young men are distributed in 18 different universities, colleges, and preparatory and training schools. The encouragement which the department of education of Salvador is lending toward the education of a number of its promising young men in the United States is shown in a recent decree concerning the teaching of English. This order provides that English should be taught for a longer period of time in the higher schools of learning in order that those students who later go to the United States to continue their education may not be too seriously handicapped by the lack of an intelligent understanding of the language. By devoting

more time to the study of English in Salvador the student coming to this country may enter immediately upon the desired studies without having to undertake the usual preliminary studies in English.

THE EXECUTIVE BOARD OF PERU.

The Peruvian legation in Washington, under date of February 7, has informed the Pan American Union that on the 4th of the month an important political movement took place in Lima, and, the President of the Republic, Mr. Billinghurst, having resigned, both Houses of Congress resolved to place the executive power of the nation in the hands of a provisional executive board, composed as follows: President of the executive board and minister of war and navy, Col. Oscar Benavides; minister of the interior, Dr. Arturo Osores; minister of justice and education, Dr. Rafael Grau; minister of the treasury, José Balta; minister of promotion, Benjamin Boza; minister of foreign affairs, Dr. José Matias Manzanilla.

INTERNATIONAL ELECTRICAL CONGRESS.

The International Electrical Congress is to be held at San Francisco, California, September 13-18, 1915, under the auspices of the American Institute of Electrical Engineers by authority of the International Electrotechnical Commission, and during the Panama-Pacific International Exposition. The deliberations of the Congress will be divided among 12 sections, which will deal exclusively with electricity and electrical practice. There will probably be about 250 papers. Membership invitations will be issued in February and March, 1914. The week following the conclusion of this congress there will assemble at the same place the International Engineering Congress. The engineering congress is supported by the societies of civil, mechanical, and marine engineers, and by the institutes of mining and electrical engineers. The meeting of the International Electrotechnical Commission will be held during the week preceding that of the electrical congress. Further information concerning the International Electrical Congress may be had by addressing Mr. P. S. Millar, secretary-treasurer, Eightieth Street and East End Avenue, New York.

RESOLUTIONS OF CRESCENT CITY, CALIFORNIA.

Among the numerous movements devoted to the development of harbors and waterways on the Pacific coast of the United States, with a view to taking proper care of the increased commercial activity which it is hoped the opening of the Panama Canal will bring, mention should be made of the action of the board of trustees of Crescent City, in the State of California. At a recent meeting of this board a set of resolutions was drawn up and approved by its

president, Mr. J. R. Breen, and by the city clerk, Mr. W. L. Bradley, in which the necessity for the construction of a breakwater or other harbor improvements is earnestly urged in order to promote the commercial, industrial, and general welfare of that city and its people. The citizens of Crescent City are to be commended on their ambition to make their city an active and important center of trade on the Pacific coast.

PUBLICATION OF THE TARIFF ON COLOMBIA.

The Pan American Union is pleased to announce that in response to the numerous requests it has received for the new customs tariff of the Republic of Colombia it is now preparing an accurate translation thereof and hopes to have it available for distribution at an early date. The measure contains certain new proposals, in addition to those agreed upon by the ministry of finance and the legislative committees that investigated the subject in 1912, and when translated and edited will furnish a valuable pamphlet for manufacturers, exporters, and importers. The many requests received for copies of the Argentine tariff law and the Bolivian and Venezuelan tariffs which have been published indicate that the editing of the tariffs of the Latin American countries is appreciated by business interests.

TOURING LATIN AMERICA.

The Business Men's League of St. Louis, Mo., is another commercial organization which has shown itself alive to the opportunities for the extension of commerce in Latin American fields. It is now engaged in organizing tours to South and Central America, the parties being composed of leading business men of the Middle West. According to Forward, the official organ of the league, the first party, which sailed early in February, went to Panama and Costa Rica. The second and more extensive tour will embrace South America, and is planned to leave March 7, 1914, on the steamship *Van Dyck* of the Lamport & Holt Line. The Illinois Manufacturers' Association excursion, whose tour has heretofore been noted in THE BULLETIN, left New York February 7, there being some 35 business and professional men in the party. Thus the good work of getting acquainted, persistently advocated by the Pan American Union for years, is going on, and friendly and cordial relations between North, South, and Central America are being strengthened and extended.

BOOK NOTES

Twentieth Century Impressions of Brazil. Its history, people, commerce, industries, and resources. Lloyd's Greater Britain Publishing Co., London. Director in chief, Reginald Lloyd; editors, W. Feldwick and L. T. Delaney; historian, Arnold Wright. 1,064 pages. Splendidly illustrated.

If one would have a complete library of the great Brazilian Republic in one volume, probably no better book could be found than this magnificent and most comprehensive work. From time to time many splendid books on Brazil have appeared, but probably none have covered such exhaustive researches and investigations in the field as the publishers of this volume have pursued. With a corps of experienced writers in the London office and a field staff whose wanderings took them all over Brazil, it would seem that nothing has been left undone that might contribute to the usefulness of the work, while its several thousand illustrations, many of which were taken by the official photographer specially for the purpose, form a collection difficult to surpass.

Since the proclamation of the Republic in 1889 Brazil has made wonderful advancement as a nation, and under the enlightened government of the present day everything points to continued rise in power and influence.

The book begins by treating of the physical geography of the country, then follows a serious discussion of the great Amazon Valley and the part that section will undoubtedly play in the Republic's development. Many pages are devoted to a description of the fauna and flora, which are graphically portrayed by the illustrations. History comes before the reader embellished by reproductions from famous paintings, all of which makes the text more interesting and realistic; then follow numerous pages on exploration, population, public health, education, sociology, literature, painting and sculpture, music, the press, and, indeed, there seems to be included every subject the foreigner as well as the native would care to study or investigate.

Under the subject of agriculture, which is destined to play a most important part in the country's development, special writers have contributed timely articles, while the industries in the various phases have been thoroughly investigated by the Lloyd staff.

Under the subject of railways there is included a full-page map which shows how far inland the many lines of communication have penetrated, while the lines planned or building are really astonishing in their great length and in the virgin areas they will open to commerce.

As a producer of the international beverage, coffee, Brazil takes first rank, her plantations covering an area of over 4,500,000 acres. Another source of national wealth is the cattle, which now number 30,000,000 and whose hides form one of the articles of export.

In industrial establishments Brazil is only in her infancy, but there are already \$250,000,000 invested in various enterprises, which give employment to a working force of 160,000 men. Of these industries cotton manufacture is responsible for 194 mills, while the jute manufacture for coffee bags is an enormous industry.

The publishers did not receive any Government aid in the production of this enormous volume, and their sole source of income is from the sale of their book and from the commercial photographs, which, instead of detracting from its usefulness, add materially to its interest and importance. The work as a whole should do much to attract attention to Brazil, a vast and growing field for capital and labor.

The Panama Canal. By Earle Harrison. Moffat, Yard & Co., New York, 1913. 34 pages. Price, \$1.

This is a story of the canal in picture. The illustrations are by color photography from the original autochrome photographs by the author. There are 17 different

subjects shown, which include the most notable features of the work and the country through which the canal lies. The colors are very natural-looking and the book forms a most pleasant reminder to those who have seen the Panama work or to those who wish to preserve the pictures, which show the real work as it progressed. Each picture is accompanied by a well-written descriptive text.

South America. By W. H. Koebel. London, Adam and Charles Black; New York, The Macmillan Co., 1913. 298 pages. Price, \$2.

This is one of the writer's numerous good books, and it deals entertainingly with South America as a whole and with the several nations into which the continent has been divided. The first chapter treats of the land in pre-Spanish days; then follows a chapter on Columbus; then we are led along historical lines to the conquest of Peru by Pizarro and told of the gradual settlement of the various sections of the continent by Europeans. The countless wars and revolutions into which all of the struggling countries were from time to time involved are graphically described; the early colonies of Chile, Paraguay, empire days in Brazil, the beginnings of the northern Republics, and, finally, the independence of all Spanish America, is related in a pleasing style.

The writer has endeavored to lay stress on the trend of the authorities and peoples in question rather than to emphasize the rigid succession of governors and presidents. It is a splendid work for one who wishes to lay a good foundation for more modern knowledge that the present times demand; and everyone who seeks knowledge of South American countries must know of the past struggles as well as present day prosperity. Two score of pictures from ancient drawings give the reader an idea of life and conditions centuries ago.

(Reviews by W. A. R.)

Directorio Hispano-American y Guia de Compradores (Spanish-American Directory and Guide). Directorio Luso-American e Guia de Compradores. By Prof. Acevedo, of the University of Columbia. New York, 320 Broadway. 12mo., 740 pages, with illustrations. Price, \$2.

The edition for 1913-14 of this annual publication has recently been issued, and is now on file in the Library of the Pan American Union. It is divided into several sections for easy reference, each section having its contents presented in English, Spanish, and Portuguese. There is considerable reading matter, giving a description of the main features of interest in the city of New York, although two pages are devoted to the building and activities of the Pan American Union in Washington. Besides that part which may be called the tourist's guide to New York, together with many practical conversion tables and other such data, there is a condensed commercial directory of the principal stores, shops, and factories, given in both Spanish and Portuguese, so that the traveler who may speak only one or the other of these languages may find what he wants with no loss of time. The book contains also a great number of advertisements of establishments supplying the needs of those who come to the city. This directory should be of decided value to visitors to the United States, whether from Spain and Portugal or from the vast area of Latin America; and as travel from the Latin Republics is steadily increasing there ought to be a corresponding increase in the demand for such a useful book.

(A. H.)

To the River Plate and Back. By W. J. Holland, LL. D. New York, G. P. Putnam's Sons, 1913. 387 pages. Price, \$3.50.

This is a very modest title which the distinguished author has given to a work that might easily carry a more significant name. Hundreds of people journey to distant lands and write about their trips, but comparatively few have the knack of seeing and describing the countless sights a bit out of the ordinary. Dr. Holland made a voyage which is becoming more and more popular; indeed, the line over which he traveled

has found it necessary to put a number of new ships in service to accommodate the increasing travel.

In the first place, the author did not wish to make the voyage to Argentina; he could not spare the time from his labors as director of the Carnegie Museum of Pittsburgh; but being unable to secure another person who could take his place, he sailed from New York on the *Vasari* with one assistant. Both gentlemen were going to Argentina to set up in the museum at La Plata the seventh reproduction of the colossal mesozoic reptile, the bones of which had been quarried from the Jurassic beds of Wyoming in the summer of 1899.

To the surprise of the author, who had previously visited many sections of the world, the voyage to Argentina proved a delightful vacation and renewed his strength and vigor and he returned home filled with good things to say about the people he met and the countries he visited.

The ship first touched at Bahia, Brazil, and here Dr. Holland went ashore for a day and interested himself in noting the habits, customs, products, and life of the people; in fact his chapter on this ancient Brazilian city surprises those of us who are familiar with its ways, with such a wealth of information gained in so short a time. Rio de Janeiro and Santos are each visited in turn, and the author declares the Brazilian capital the most beautiful city of the world.

He was delighted with Argentina, which he saw from Tucuman to La Plata, as well as spending many days in the capital, but the interest of the book is in the countless unusual sights and happenings that the author non-technically records. Lastly, his impressions and reflections are well worth reading by all who are interested in the future and present welfare of two continents. The author regrets that he can not revisit South America in A. D. 2012 to see the transformation that is assured.

The Story of the Panama Canal. By Logan Marshall. The John C. Winston Co., Chicago, 1913. 286 pages. Price, \$1.

Of the many books that have already appeared and the numerous ones that are rapidly coming before the public which tell the story of the greatest engineering work ever accomplished, the vast majority are content to talk of Panama alone. This author, however, gives his readers a glimpse of several of the world's great waterways, which by way of diversion add much to his volume. After the usual history and description of the Isthmus and the building of the canal several chapters follow which deal with military and political aspects and the probable results of the operation of the Panama route.

The appendixes, containing about 30 pages, tell of world canals in general and those of China, India, etc., in particular, and of the economic effects of many ship canals already in operation.

The book is interestingly written, contains many tables of valuable data, while more than 40 illustrations give those who have not visited Panama a fair idea of the great enterprise and its consummation.

The Panama Canal. By Frederic J. Haskin. Doubleday, Page & Co., Garden City, L. I., 1913. 386 pages.

"The primary purpose of this book is to tell the layman the story of the Panama Canal." Thus in the very preface we see the object of the author's labor. The book is divided into 22 chapters, beginning with "The land divided," and touching upon every phase of the great undertaking, and concluding with a chapter on the Panama-Pacific Exposition. A large bird's-eye view map is included as frontispiece which gives a most graphic idea of the canal, and will be especially interesting to those who have not yet visited the Canal Zone. The book is written in a pleasing and simple manner, so far as engineering problems and descriptions will permit, while a hundred fine illustrations add materially to its educational value.

Plantation White-Sugar Manufacture. By W. H. Th. Harloff and H. Schmidt. London, Norman Rodger, 1913. 135 pages.

This is the translation, which was made by James P. Ogilvie, of the original book which was published in German. The authors are both residents of Java, and are connected with the manufacture of sugar, the former being manager of the Boedoeran factory and the latter a consulting sugar chemist and engineer. The book therefore is based from a practical standpoint in sugar making and a second edition was called for within six months after its first appearance in Java. The translator is technical editor of the International Sugar Journal and has sought to give to English readers the benefit of a most popular work.

The book is divided into two parts, the first being a general introduction to the subject, while the latter takes up the manufacture in its countless details.

Pacific Shores from Panama. By Ernest Peixotto. New York, Charles Scribner's Sons, 1913. 285 pages. Price, \$2.50

The author made the trip down the west coast of South America, visiting Peru, Bolivia, Chile, etc., and his various articles which have heretofore appeared in Scribner's Magazine are now published in book form. Being of artistic taste he sees the picturesque side of the countries and their numerous attractions, which he gives to the reader in text and in samples of his skill as an artist. Most of the chapters of the book have been reviewed in the pages of the MONTHLY BULLETIN from time to time as they first appeared in serial form. The work is beautifully bound and the many drawings by the author and many photographs depict the life and customs of the countries with a fresh vigor not to be found in other books. He finds that living outside the large cities is in many cases quite primitive, but withal it carries a fascination that appeals to those in search of the unusual, and with the opening of the Panama Canal the author sees a mighty tourist trade directed to the west-coast countries of the great Southern Continent.

Bibliographie Hispanique. 1910-11. New York, The Hispanic Society of America. Two volumes, 139 and 163 pages, respectively.

Progressive Chile. By Robert E. Mansfield. New York, The Neale Publishing Co., 1913. 254 pages. Price, \$2.

This is an especially interesting volume, being a record of impressions gained from personal observations of the life and customs of the people in one of "the most enlightened, progressive, and interesting countries of South America."

The book opens with a geographical glimpse of the country, in which we are introduced to the dry and barren lands of the nitrate region, the picturesque rocky headlands of the southern coast, and the icy glaciers of the Strait of Magellan. A brief history of the country and of the early inhabitants is followed by many pages on "classified husbandmen," which give the reader numerous details that are lacking in volumes that have preceded Progressive Chile. Religion, marriages and deaths, courts and legal procedure, crime, schools and colleges, villages and cities, railways, industrial interests, and other chapters fill the remaining pages with up-to-date matter on the many phases of the country and its people. The author divides the Republic into four zones—"Mineral," "mineral and agricultural," "agricultural," and "wooded and fishing." Each of these zones is treated from the standpoint of one who has been on the ground and writes his own observations and impressions. He has not attempted to conceal from view the unsightly spots and blemishes that mar the social structure and disfigure the body politic in Chile, as they do in all other countries, but has told the truth as he sees the facts upon which to base his statements. On the other hand, he knows that the Chilean people possess so many admirable traits, commendable characteristics, and desirable accomplishments that he has set them forth in a fair and just story.

Progressive Chile is an interesting and well-written volume and will be an acquisition to the library of all who are concerned in the progress of one of the greatest nations of South America.

Panama: The Canal, the Country, and the People. By Albert Edwards. New York, The Macmillan Co. 584 pages. Price, \$2.50.

This is an interesting book, beginning with the sea route to Panama, which description is followed by chapters on the Canal Zone in 1909, the cities of Colon and Panama, geography of the Isthmus, the Panamanians, the jungle, the first colonists, and, in fact, about everything one would wish to know before beginning a thorough study of the great engineering work and the measures that made it a possibility and finally an accomplished fact. The work done by the French, then under the several American engineers, is recounted in detail, and this is followed by descriptions of the locks and many other matters connected with their service and operation. A large number of well-executed halftone illustrations convey an idea of life and conditions and give one a desire to go and see for himself the wonderful work now about completed.

The South American Year Book. Compiled and edited by C. S. Vesey Brown. Published by the proprietors, The Louis Cassier Co. (Ltd.), London, 1913. 638 pages. Price, 31 shillings, 6 pence.

This is a large and useful volume containing general information relating to the 10 Republics of South America, to British, Dutch, and French Guiana, to the Panama Canal, and to the Falkland Islands. The book is divided into two parts, the first dealing with the railways of each country and the second with the countries themselves.

Under each Republic there is given a short historical sketch; this is followed by government, officers of state, senate and chamber of deputies, list of foreign officials, holidays, currency, foreign companies, shipping, banks, and countless other details that any person thinking of doing business with the country would wish to know.

After a general and detailed summary of each country such subjects as the Pan American Union, newspapers, Monroe doctrine, shipping services, and many other important factors that are developing the whole continent come in for mention and explanation. It is a book that should find its place in every office doing business with the South American countries, as well as in libraries and reading rooms all over the world. Its compilation represents long and serious labor, while the many illustrations and maps add materially to its utility as a consulting medium.

The Tourist's Spain and Portugal. By Ruth Kedzie Wood. New York, Dodd, Mead & Co., 1913. 357 pages. Price \$1.25.

Spain and Portugal invite the tourist. Both countries have established commissions for making the stranger's sojourn attractive and pleasant, while hotels on modern plans have been constructed in the leading cities and resort centers, so that travel to Iberia is no longer regarded as an adventure. As a result of these efforts on the part of officials the tourist is found in Spain and Portugal in increasing numbers, and very naturally a guidebook is a necessity.

The tourist's Spain and Portugal fills a demand; it is very cleverly gotten up by one who has already given the tourist a complete English guidebook of Russia. In fact, the latter was such a pronounced success that the Spanish Government invited Mrs. (or Miss) Wood to prepare a similar work on that country.

First, we have a story on transportation and information in general, which is followed by chapters on hotels, festivals, sports, cities, famous sections, etc. For instance, in telling of the important sights awaiting inspection in Madrid the author devotes 36 pages to the capital city, and, needless to say, everything worth seeing is mentioned,

and incidentally how to get there and what it will cost. In famous Andelusia and elsewhere our author conducts us to the countless historic spots, and at each stopping place we are told where to go and what to see.

About a third of the book is devoted to Portugal, where, as in Spain, the visitor is advised what to see and the best manner of seeing it; in fact, the whole work is just the handy volume one would wish to take along in journeying anywhere in the ancient lands of Spain and Portugal.

The Blue Book and Social Register of Cuba. Francis J. Acosta, publisher. Habana, Cuba, 1914. 95 pages. Price \$1.50.

This is an alphabetical list of the English-speaking residents and other information calculated to be of interest. It is divided into four parts, as follows: Part I, Alphabetical list; Part II, At home days and club list; Part III, General information; Part IV, Buyer's guide.

It is a valuable compilation and will serve a good purpose both in the United States and in Cuba. To the tourist visiting that country it will prove especially valuable, inasmuch as the many points of interest are described, how to get there, the price of vehicles, statistical matter, movement of trade, and countless other subjects are treated. The alphabetical list covers more than 50 pages, indicative of the spread of the English tongue throughout the Republic of Cuba.

The Mulberry Tree. By Winifred James. New York, Dodd, Mead & Co. 281 pages. Price, \$2.50.

This is a travel book, but no one would ever associate the name with the subject, a fact that is really unfortunate when we consider the countless thousands of people who will travel to Caribbean countries, of which the book treats. Apparently the writer possesses a very vivid imagination. She recalls the days of her childhood when the old mulberry tree in the back yard afforded by its swinging branches many "travels," which in reality she enjoyed in later years.

The author is an extensive traveler and this book reflects her experiences and impressions of nearly a year's wanderings in Caribbean countries. She visited Panama, Costa Rica, Jamaica, and other sections, and everywhere found something interesting to write about and which appealed to her artistic senses. For instance, in sojourning at the Myrtle Bank Hotel, in Kingston, she enjoyed watching the hundreds of tourists as they came, tarried, and departed; in interior sections of Jamaica she found that the natives and their lives furnish material for art and thought; in San Jose she saw the inmates of the asylum splendidly cared for; in Chiriqui prison, in Panama, she talked with the downtrodden, especially one American woman murderer; in many other instances the author explored unfrequented places and writes interestingly about them.

Chapters on clothes, on a burglary, on marriage, a storm, on banana plantations, and a dozen other subjects give the reader a fair knowledge of things to be seen in Caribbean countries. The book is written in a conversational style and shows that the author has a knack for hunting unusual things even if they appear along well-beaten highways.

Two on a Tour in South America. By Anna Wentworth Sears. Illustrated from photographs by the author. New York, D. Appleton & Co., 1913. 312 pages. Price, \$2.

This tour follows the well-known route down the west coast of South America, across the Andes from Valparaiso to Buenos Aires, and then up the Brazilian coast. The only interior country visited was in passing over the Andes, which alone are well worth going miles to see, if only from a car window. The author's descriptions

of life aboard steamer from Panama southward are realistic and charmingly written; the ship companions and the people met at various ports of call receive due attention, and she pities the people who are compelled to live at some of the insignificant villages scattered along the coast. Buenos Aires and Rio de Janeiro, of course, are found delightful cities, but only one day at the latter capital did not suffice for even an introduction to the life and its activities.

The book will be of interest to persons who have never been in any Latin country and who are looking more particularly for the impressions of a traveler who did not tarry, but who made good use of her opportunities, limited as they were. True to its title, it is South America as seen from a short tour, which so many North Americans are now making.

The Panama Canal. By J. Saxon Mills, M. A. London, Thos. Nelson & Sons, 1913. 344 pages. Price, \$1.

This is a history and description of the great enterprise as seen by an English barrister. He takes up such subjects as the Clayton-Bulwer treaty and the Suez Canal, the United States and Colombia, the battles of levels, the canal and the Americas, etc. Glowing tributes are paid not only to the numerous officials who have taken part in the work, but two young Ohioans who offered themselves as subjects for yellow-fever inoculation for purposes of investigations are rightly honored.

(Reviews by W. A. R.)

Hunting Extinct Animals in the Patagonian Pampas. By Prof. Frederick Brewster Loomis, of Amherst College. New York, Dodd, Mead & Co., 1913.

From Eocene times until about the ice age, when recent animal forms, such as the puma, guanaco, deer, and tapir came by the pathway made by the rising of the Isthmus of Panama, South America was isolated from the rest of the world. It was then inhabited by gigantic creatures, of which the sloths, armadilloes, and anteaters are diminutive representatives, and for about 400 miles north of the Strait of Magellan the remains thus found are of the Miocene age. But somewhat farther to the north, chiefly in the Argentine Territory of the Chubut, lies the key that will some day reveal to us the sources of South American animals.

It was to find this answer that the Amherst College Expedition to Patagonia in 1911 studied the geology and collected the fossils, the vertebrates of Patagonia, and carefully investigated the sources of the prehistoric South American primitive ancestral animals. The expedition also studied the origin of typical South American forms of animal life, the more primitive types being found only in Patagonia, more particularly in the Argentine Territories of Santa Cruz and the Chubut.

This expedition continued in a measure the work begun by the Princeton expedition to Patagonia in 1896-1899, as well as the magnificent work in scientific exploration done there by so many learned Argentines, among whom may be mentioned Francisco P. Moreno and Florentino Ameghino.

Although only about four months were spent on actual research, which took place along the coast line of the Chubut Territory and the northern part of that of Santa Cruz, perhaps the expedition's most important discovery was that of a skull 38 inches long, with tusks in the upper jaw fully 10 inches in length. The lower jaws had each an 8-inch tusk in front. This skull suggested those of the ancestral elephants found in the Eocene beds of the Fayume desert in Egypt, though the teeth are much more advanced in their development.

Prof. Loomis also draws a vivid picture of conditions in those portions of Argentina that he visited. The book is well illustrated by many graphic photographs and a map.

(C. L. C.)

SUBJECT MATTER OF CONSULAR REPORTS

REPORTS RECEIVED UP TO FEBRUARY 10, 1914.¹

Title.	Date.	Author.
ARGENTINA.		
Statistics of Annual for 1912, volume 1.....	1913 Nov. 20	R. M. Bartleman, consul general, Buenos Aires.
Foreign commerce for 9 months of 1913.....	Nov. 21	Do.
Copy of "Standard" article on Argentine foreign trade, a short history of its development.	Dec. 8	Do.
Lands in Argentina.....	Dec. 10	Do.
Copy of laws, decrees, and regulations in force respecting importation and exportation of plants and seeds.	...do....	Do.
BRAZIL.		
Report on vehicles.....	Dec. 9	Geo. H. Pickerell, consul, Para.
Exports of crude rubber from Para, Manaos, Iquitos, and Itacoatiba during November, 1913.	Dec. 18	Julius G. Lay, consul general, Rio de Janeiro.
United States and Brazil Steamship Line.....	Undated.	Albro L. Burnell, vice consul general in charge, Rio de Janeiro.
Sale of the Lloyd-Brazileiro Line of steamers by the Brazilian Government. Offers to be received until Apr. 11, 1914.	Dec. 19	Do.
Statement of commerce and industries of Brazil, prepared for members of Latin-American trade tour of Southern Commercial Congress.	Dec. 20	Do.
Exports of crude rubber to Europe, year ended December 31, 1913.	Undated.	Geo. H. Pickerell, consul, Para.
CHILE.		
Permanent exposition of construction material.....	Dec. 6	Alfred A. Winslow, consul, Valparaiso.
Permanent exposition of American products in Chile.....	Dec. 23	Do.
Automobiles—no great future until better roads are provided.....	Dec. 27	Do.
Imports of "sole leather" and "leather for uppers.".....	...do....	Do.
COLOMBIA.		
Establishment of new steamship service.....	Dec. 17	Henry P. Starrett, consul, Cartagena.
Automobile market in Cartagena.....	...do....	Do.
Stoves—no market.....	1914 Jan. 12	Isaac A. Manning, consul, Barranquilla.
CUBA.		
Coal imports for first half of 1912.....	Jan. 10	R. E. Holaday, consul, Santiago de Cuba.
ECUADOR.		
National steamship company for Ecuador.....	1913. Nov. 4	Frederic W. Goding, consul general, Guayaquil.
Supplement to annual report for 1912.....	Dec. 10	Charles Baker, vice consul general, Guayaquil.
Report on hookworm disease in Ecuador, data supplied by Dr. José Dario Moral.	Dec. 31	Frederic W. Goding, consul general, Guayaquil.
MEXICO.		
Crude oil shipments.....	Nov. 6	Clarence A. Miller, consul, Tampico.
Report on vehicles.....	Dec. 8	Lucien N. Sullivan, consul, La Paz.
Trade in vehicles.....	Dec. 18	T. C. Hamm, consul, Durango.
New dam at Texolo, Veracruz.....	Dec. 29	Wm. W. Canada, consul, Veracruz.
Well-drilling machinery; no market.....	Dec. 31	Richard M. Stadden, vice consul, Manzanillo.
Annual commercial and industrial report for 1912 (Tampico District).	...do....	Clarence A. Miller consul, Tampico.

¹ This does not represent a complete list of the reports made by the consular officers in Latin America, but merely those that are supplied to the Pan American Union as likely to be of service to this organization.

COMMERCE OF ECUADOR

THE foreign trade of Ecuador for the year 1911 (the latest year for which complete official figures are available), compiled from the Bulletin of Customs Statistics, was 49,755,847 sures, represented by imports to the value of 23,640,133 sures and exports of 26,115,714 sures. For the preceding year the imports were 16,476,603 sures; exports, 28,062,363 sures; total, 44,538,966 sures. This shows an increase in imports of 7,163,530 sures and a decrease in exports of 1,946,649 sures, or a net increase in the foreign trade of 5,216,881 sures.

Valuing the sucre at 48.6 cents (10 sucre=£1), the imports for the year 1911 amounted to \$11,489,104 and the exports to \$12,692,237, or a total of \$24,181,341. The figures for the preceding year were: Imports, \$8,007,629; exports, \$13,638,308; total, \$21,645,937, showing an increase in imports of \$3,481,475 and a decrease in exports of \$946,071, or a net increase in foreign trade of \$2,535,404.

IMPORTS.

The imports by countries for the years 1908, 1909, 1910, and 1911 were as follows:

Countries	1908	1909	1910	1911
United Kingdom.....	\$3,488,227	\$3,052,870	\$2,455,599	\$2,844,473
United States.....	1,991,479	2,330,851	2,249,674	2,588,168
Germany.....	2,088,942	1,626,576	1,570,903	2,381,573
Australia ¹		19,629	9,053	978,111
France.....	717,933	593,343	525,534	714,426
Belgium.....	406,804	425,427	325,351	534,637
Italy.....	455,659	448,234	336,454	501,468
Spain.....	328,505	322,506	271,390	444,058
Peru.....	354,073	109,601	59,763	275,164
Salvador.....	48,929	15,820	77,127	77,119
Colombia ¹			1,111	1,384
Chile.....	62,707	98,538	53,836	49,690
Other countries.....	45,741	45,756	71,561	49,979
Total.....	9,989,599	9,090,262	8,007,629	11,489,104

¹ In 1908 included under "Other countries."

According to the report of United States Vice Consul General Charles F. Baker, Guayaquil, the imports by countries for the year 1912, were: United Kingdom, \$3,219,238; United States, \$2,764,109; Germany, \$2,166,021; Australia, \$5,800; France, \$633,800; Italy, \$507,117; Belgium, \$478,938; Spain, \$395,104; Peru, \$181,467; Salvador, \$19,585; Colombia, \$83,357; Chile, \$85,724; other countries, \$112,583; total, \$10,652,843.

The imports for the four last years in broad classifications were as follows:

Classification.	1908	1909	1910	1911
Oils in general.....	Sucre.	Sucre.	Sucre.	Sucre.
Live animals.....	132,875	133,218	162,578	278,398
Arms and ammunition.....	7,090	20,923	17,460	12,868
Alimentary substances.....	338,739	72,101	222,853	583,574
Boots, shoes, and findings.....	2,447,662	2,264,400	2,641,793	3,444,680
Carriages.....	207,305	233,662	192,085	258,710
Cement.....	74,719	70,794	29,789	74,688
Leather.....	82,358	111,911	112,028	94,225
Drugs.....	226,373	270,371	240,868	344,078
Vessels.....	553,941	486,715	476,830	657,712
Hardware.....	37,796	22,370	38,752	14,288
Matches.....	1,459,194	1,138,787	1,125,893	1,479,831
Cordage.....	84,716	32,371	50,735	34,558
	320,142	316,350	303,606	439,613

Classifications.	1908	1909	1910	1911
Musical instruments.....	Sucres. 144,151	Sucres. 112,023	Sucres. 91,229	Sucres. 133,033
Jewelry.....	29,327	43,391	9,386	26,948
Books, blank and printed.....	110,884	96,862	80,044	95,675
Crockery and glassware.....	205,932	233,204	234,623	256,760
Lumber, rough and finished.....	229,126	215,845	131,743	188,679
Machinery.....	636,977	919,454	719,924	1,387,286
Mineral products.....	676,555	601,302	480,079	460,509
Paper in general.....	354,757	334,510	231,678	308,006
Perfumery.....	119,166	129,908	113,193	212,544
Paints and varnishes.....	90,822	106,225	81,401	101,119
Ready-made clothing.....	828,575	640,787	508,991	823,673
Silk fabrics, pure and mixed.....	249,714	194,738	133,132	136,374
Hats.....	314,795	288,681	189,361	320,090
Textiles, other than silk.....	5,847,810	5,522,477	3,532,847	6,526,308
Vegetables.....	109,076	113,647	106,237	144,111
Candles.....	332,634	223,124	256,060	255,815
Wines and liquors.....	1,084,384	646,547	719,716	705,454
Miscellaneous.....	1,264,881	1,347,849	1,178,097	2,190,536
Total.....	18,602,426	16,958,587	14,413,011	21,990,133
Monoy.....	1,862,305	1,745,656	2,063,592	1,650,000
Grand total.....	20,554,731	18,704,243	16,476,603	23,640,133
Value in United States gold.....	\$9,989,599	\$9,090,262	\$8,007,629	\$11,489,104

The report of Mr. Baker gives the imports by classifications for 1912 as follows: Oils in general, \$115,092; live animals, \$47,111; arms and ammunition, \$49,521; alimentary substances, \$1,849,847; boots, shoes, and findings, \$234,302; carriages, \$76,809; cement, \$56,423; leather, \$26,569; drugs, \$436,229; vessels, \$10,390; hardware, \$798,971; matches, \$26,917; cordage, \$166,328; musical instruments, \$53,699; jewelry, \$19,807; books, blank and printed, \$34,135; crockery and glassware, \$161,102; lumber, rough and finished, \$94,594; machinery, \$620,554; mineral products, \$206,445; paper in general, \$171,167; perfumery, \$79,065; paints and varnishes, \$41,063; ready-made clothing, \$624,959; silk fabrics, pure and mixed, \$18,143; hats, \$146,185; textiles other than silk, \$2,784,944; vegetables, \$54,899; candles, \$155,938; wines and liquors, \$375,574; miscellaneous, \$831,151; total, \$10,367,510; money, \$285,333; grand total, \$10,652,843.

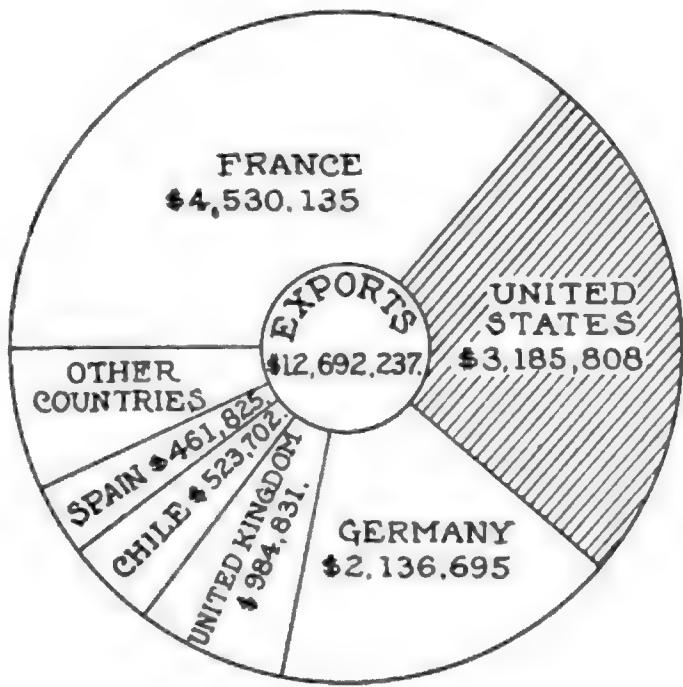
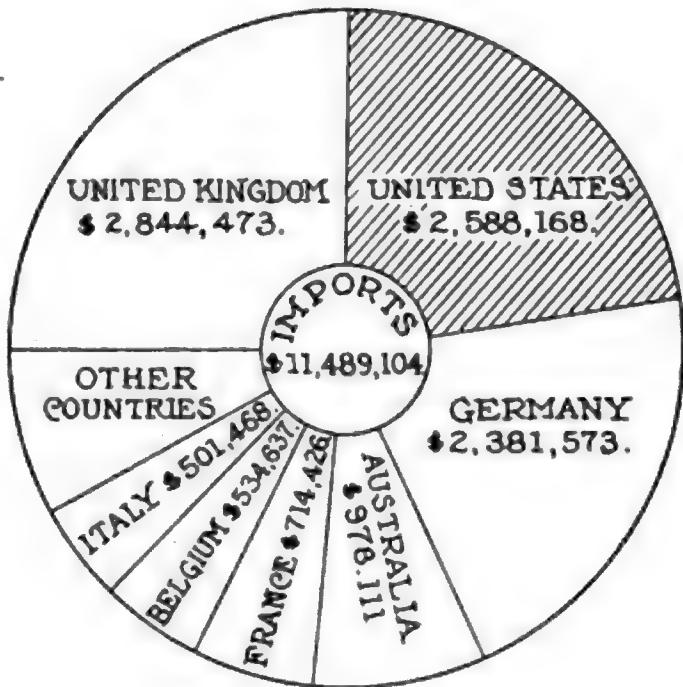
Imports by ports, 1911.

	Sucres.
Macara.....	94,581
Puerto Bolivar.....	155,899
Guayaquil.....	21,290,180
Manta.....	1,102,074
Bahia de Caraquez.....	649,941
Esmerralda.....	244,249
Tulcan.....	103,209
Total.....	23,640,133
Value in United States gold.....	\$11,489,104

The imports by ports for the year 1912, according to Mr. Baker, were as follows: Macara, \$20,526; Puerto Bolivar, \$73,258; Guayaquil, \$9,639,281; Manta, \$480,784; Bahia de Caraquez, \$273,764; Esmerralda, \$106,955; Tulcan, \$58,275; total, \$10,652,843.

ECUADOR COMMERCE - 1911

\$ 24,181,341.



PAN AMERICAN UNION

EXPORTS.

The exports by countries for the years 1908, 1909, 1910, and 1911 were as follows:

Countries.	1908	1909	1910	1911
France.....	\$4,911,405	\$4,335,905	\$4,785,613	\$4,530,135
United States.....	3,763,009	3,320,494	4,082,112	3,185,808
Germany.....	964,012	1,533,815	2,243,607	2,136,695
United Kingdom.....	1,712,119	1,213,769	1,136,827	984,831
Chile.....	273,979	391,521	383,071	523,702
Spain.....	777,399	284,252	399,656	461,825
Austria-Hungary.....	130,530	131,830	109,402	178,115
Netherlands.....	43,558	311,549	87,803	159,911
Italy.....	112,640	222,420	150,176	150,230
Panama.....	33,102	51,137	62,811	75,863
Peru.....	72,300	156,227	71,954	68,175
Colombia ¹			1,112	1,384
Uruguay ²				403
Other countries.....	130,721	137,056	123,489	130,345
Total.....	12,907,774	12,091,096	13,638,308	12,692,237

¹ In 1908 included under "Other countries."

² In 1908 and 1909 included under "Other countries."

According to the Bulletin of Customs Statistics, the exports by countries for the year 1912 were: France, \$4,096,863; United States, \$3,957,306; United Kingdom, \$2,042,278; Germany, \$1,523,356; Chile, \$632,345; Spain, \$423,614; Austria-Hungary, \$171,496; Netherlands, \$280,950; Italy, \$150,207; Panama, \$69,301; Peru, \$145,823; Colombia, \$55,636; Cuba, \$50,566; Other countries, \$89,955; total, \$13,689,696.

The exports by articles for the years 1908, 1909, 1910, and 1911 were as follows:

	1908	1909	1910	1911
Alligator skins.....	Sucres.	Sucres.	Sucres.	Sucres.
Cacao.....	24,230	11,040	18,100	11,390
Coffee.....	17,737,040	14,522,617	16,213,670	16,095,248
Cotton.....	1,015,938	1,037,320	1,500,540	2,281,230
Fresh fruits.....	1,605	4,591	38,478	30,072
Bananas.....	108,569	127,335	63,463	66,920
Gold (bars, dust, etc.).....	401,368	286,993	234,880	323,303
Gold ore.....	358,504	261,743	276,781	202,125
Panama hats.....	1,598,568	2,310,142	2,584,342	2,889,579
Mocora straw.....	46,680	33,940	27,245	62,138
Toquilla straw (for hats).....	67,274	99,465	61,153	53,430
Hides of neat cattle.....	333,407	452,797	528,240	409,105
Ivory nuts.....	985,252	3,061,942	3,427,883	1,803,548
Rubber.....	843,522	1,540,668	2,065,903	1,433,434
Tobacco.....	30,110	71,911	28,706	9,333
Miscellaneous.....	174,419	154,790	162,750	330,127
Total.....	23,726,636	23,977,294	27,292,123	26,071,535
Reexports.....	2,832,571	901,505	770,240	44,179
Grand total.....	25,559,207	24,878,799	28,062,363	26,115,714
Value in United States gold.....	\$12,907,774	\$12,091,096	\$13,638,308	\$12,692,237

According to the Bulletin of Customs Statistics, the exports by articles for the year 1912 were: Alligator skins, 16,210 sucre; cacao, 15,715,616 sucre; coffee, 1,609,418 sucre; cotton, 37,952 sucre; fresh fruits, 56,041 sucre; bananas, 66,044 sucre; gold (bars, dust, etc.), 629,418 sucre; Panama hats, 2,817,353 sucre; toquilla straw, 73,142 sucre; Mocora straw, 60,224 sucre; hides of neat cattle, 605,541 sucre; ivory nuts, 1,923,052 sucre; rubber, 1,435,248 sucre; tobacco, 48,205 sucre; miscellaneous, 336,961 sucre; total, 25,430,425 sucre; reexports, 2,737,674 sucre; grand total, 28,168,099 sucre.

The exports of cacao, by quantities and countries, for the year 1911 were:

	Kilos.
France.....	20,775,411
United States.....	7,456,426
Germany.....	5,252,299
Spain.....	1,944,400
United Kingdom.....	1,334,268
Austria-Hungary.....	871,063
Netherlands.....	649,365
Uruguay.....	145,288
Italy.....	124,833
Belgium.....	98,878
Chile.....	98,082
Mexico.....	47,808
Bolivia.....	4,830
 Total.....	 38,802,951

No further details of exports for 1911 are available from official sources. According to the report of United States Consul General Herman R. Dietrich, Guayaquil, for the year 1911 the exports of cacao were: To France, \$4,317,580; to the United States, \$1,536,954; to Germany, \$1,031,259; to Spain, \$435,925; to the United Kingdom, \$255,653; and to Austria-Hungary, \$182,146.

The Bulletin of Customs Statistics gives the exports of cacao in 1912 as follows: To France, 19,066,107 kilos, worth 7,904,443 sures; to the United States, 10,514,171 kilos, worth 4,133,072 sures; to Germany, 3,046,926 kilos, worth 1,226,375 sures; to Spain, 1,696,275 kilos, worth 793,362 sures; to the United Kingdom, 1,033,434 kilos, worth 398,526 sures; to Austria-Hungary, 755,787 kilos, worth 227,553 sures; all other countries, 1,578,487 kilos, worth 709,267 sures; total, 38,224,698 kilos, worth 15,715,616 sures.

According to Mr. Dietrich's report the exports of coffee in 1911 were: To Chile, \$435,012; to the United States, \$349,983; to Germany, \$145,135; to France, \$90,668; and to Spain, \$32,402.

The Bulletin of Customs Statistics gives the exports of coffee for the year 1912 as follows: To Chile, 1,544,489 kilos, worth 900,753 sures; to the United States, 525,069 kilos, worth 291,825 sures; to France, 301,670 kilos, worth 180,479 sures; to the United Kingdom, 129,825 kilos, worth 77,060 sures; to Panama, 105,649 kilos, worth 64,903 sures; and to Germany, 110,362 kilos, worth 63,162 sures.

According to Mr. Dietrich's report, the exports of hides of neat cattle in 1911 were: To Germany, \$68,930; to the United States, \$46,745; to the United Kingdom, \$43,125; and to France, \$19,947.

The report of United States Vice Consul General Charles F. Baker, Guayaquil, gives the exports of neat cattle in 1912 as follows: To Germany, \$50,961; to the United States, \$102,195; to the United Kingdom, \$77,497; and to France, \$20,475.

According to Mr. Dietrich's report, the exports of ivory nuts in 1911 were: To Germany, \$420,486; to France, \$163,995; to the United States, \$115,190; to Italy, \$108,876, and to the United Kingdom, \$47,241.

The report of Mr. Baker gives the exports of ivory nuts in 1912 as follows: To Germany, \$420,763; to the United States, \$279,523; to France, \$92,435; to Italy, \$106,537; to the United Kingdom, \$18,098; and to Spain, \$18,156.

According to Mr. Dietrich's report, the exports of rubber in 1911 were: To the United States, \$571,075; to Germany, \$100,700; and to the United Kingdom, \$10,194.

The report of Mr. Baker gives the exports of rubber in 1912 as follows: To the United States, \$652,692; to Germany, \$54,707; and to the United Kingdom, \$11,567.

According to the report of Mr. Dietrich, the exports of Panama hats in 1911 were: To the United Kingdom, \$599,113; to Germany, \$385,507; and to the United States, \$256,387.

The report of Mr. Baker gives the exports of Panama hats in 1912 as follows: To the United Kingdom, \$599,230; to Germany, \$346,560; and to the United States, \$237,633.

According to Mr. Dietrich's report in 1911 the exports of cotton were: To the United States, \$9,899; to the United Kingdom, \$3,823; and to Germany, \$1,150.

The report of Mr. Baker gives the exports of cotton in 1912 as follows: To Colombia, \$15,286; to Germany, \$3,068; and to the United Kingdom, \$128.

Exports by ports, 1911.

	Sucres.
Macara.....	9,810
Puerto Bolivar.....	119,014
Guayaquil.....	21,686,474
Ballenita.....	63,912
Manglaralto	267,340
Machalilla.....	70,358
Callo.....	558,933
Manta.....	1,253,258
Bahia de Caraquez.....	1,402,092
Esmeraldas.....	563,081
Tulcan.....	121,442
 Total.....	 26,115,714
Value in United States gold.....	\$12,692,237

According to the Bulletin of Customs Statistics the exports by ports for 1912 were as follows: Macara, 9,997 sucre; Puerto Bolivar, 181,835 sucre; Guayaquil, 23,083,499 sucre; Ballenita, 57,721 sucre; Manglaralto, 183,594 sucre; Machalilla, 321,819 sucre; Callo, 807,295 sucre; Manta, 1,338,817 sucre; Bahia de Caraquez, 1,588,808 sucre; Esmeraldas, 489,124 sucre; Tulcan, 105,590 sucre; total, 28,168,099 sucre.



COMMERCE OF PERU FOR 1912

THE total foreign trade of Peru for the year 1912, according to the message of President Billinghurst, presented to the Peruvian National Congress, on July 28, 1913, amounted to 14,596,267 libras, of which 5,157,686 libras were imports, and 9,438,581 libras were exports.

In 1911, the imports were, 5,438,246 libras; exports, 7,416,028 libras; total, 12,854,274 libras. There was, therefore, a decrease in imports for the year 1912, as compared with the preceding year, of 280,560 libras, and an increase in exports of 2,022,553 libras, or a net increase in the foreign trade of 1,741,993 libras.

Estimating the value of the libra at \$4.86 United States gold (the same as the British pound sterling) the value of the Peruvian foreign trade for the year 1912 would be: Imports, \$25,066,354; exports, \$45,871,503; or a total of \$70,937,857. On the same basis the figures for 1911 would be: Imports, \$26,429,875; exports, \$36,041,896; total, \$62,471,771. This shows a decrease in imports of \$1,363,521, and an increase in exports of \$9,829,607, or a net increase of \$8,466,086.

There is no official publication as yet of the details of imports and exports for the year 1912, either in value or quantities. These details for the year 1911 are taken from the "Boletin de Aduanas."

IMPORTS.

The following table shows the imports by countries for the years 1909, 1910, and 1911:

Countries.	1909	1910	1911
United Kingdom.....	\$7,619,983	\$8,158,489	\$8,358,383
United States.....	4,112,180	4,484,214	8,069,863
Germany.....	3,339,951	3,842,854	4,598,565
Belgium.....	1,201,996	1,217,892	1,623,154
France.....	950,516	2,361,492	1,407,114
Australia.....	572,821	885,259	1,114,427
Italy.....	732,456	815,461	969,328
China.....	98,392	20,212	1,752,625
Hongkong.....	441,878	639,996	.....
Spain.....	255,242	254,219	386,841
Chile.....	885,500	739,638	373,101
British India.....	154,758	144,968	189,431
Japan.....	42,060	72,439	114,496
Portugal.....	140,013	208,243	102,351
Cuba.....	13,317	36,046	77,949
Ecuador.....	166,155	100,787	61,992
Salvador.....	23,893	25,845	43,757
Brazil.....	83,803	35,649	43,280
Argentina.....	1,214	54,832	42,610
Canada.....	3,888	16,424	.....
Other countries.....	51,513	91,231	100,608
Total.....	20,891,329	24,206,188	26,429,876

¹ Includes Hongkong.

The imports for 1910 and 1911 under 20 major classifications were:

Articles.	1910	1911
Cotton textiles and manufactures	£588,031.0.07	£745,807.0.95
Wool and animal hair and manufactures	213,387.1.12	321,118.6.21
Linen, hemp, jute, and other textile fibers and manufactures	93,740.5.65	132,781.0.96
Silk, animal and vegetable, and manufactures	61,744.0.17	73,212.0.46
Hides, skins, and leather goods	34,781.4.98	104,350.4.81
Wearing apparel and notions ¹	167,375.8.95	21,159.8.75
Furniture	31,924.0.03	35,268.0.42
Metals, and manufactures of	449,199.7.81	1,001,592.3.00
Stones, earths, coal, glass and china ware	122,091.9.29	408,728.4.22
Woods, lumber and manufactures	89,852.9.51	362,872.9.53
Paints, dyes, varnishes, bitumen, gums	79,702.9.45	213,015.2.84
Live animals	9,310.9.17	13,586.5.50
Stationery, paper, and cardboard	66,468.8.01	176,596.3.57
Tools, ships' stores, machines, and vehicles	183,704.8.31	418,015.8.02
Musical instruments	7,420.0.01	28,261.7.15
Arms, ammunition, and explosives	38,154.8.72	113,182.4.11
Dry goods and miscellaneous articles	1,739,630.6.55	272,729.7.14
Beverages	115,527.0.97	119,166.8.21
Comestibles and condiments	734,404.7.35	684,079.6.80
Medicines and pharmaceutical products	113,298.5.40	178,958.7.27
Articles not classified	40,764.9.66	13,211.9.86
Total	£ 4,980,697.1.68	5,438,245.9.69
Value United States gold	\$24,206,184.24	\$26,429,875

¹ In 1911 included wearing apparel only.

* This figure is read 4,980,697 libras or pounds, 1 sol and 68 centimos.

The imports by countries under the above classifications for the years 1910 and 1911 were as follows:

	1910	1911
Cotton textiles and manufactures:		
United Kingdom	£363,735.3.76	£437,991.3.64
Germany	90,142.0.23	109,951.4.93
Italy	46,065.2.47	83,079.1.17
Belgium	27,170.8.47	34,905.8.64
United States	30,659.1.55	28,687.2.82
Spain	12,496.3.73	26,732.1.79
France	12,253.2.58	20,401.7.10
Japan	2,483.0.96	1,683.3.17
Other countries	3,045.6.32	2,474.7.69
Total	588,031.0.07	745,807.0.95
Wool and animal hair and manufactures:		
United Kingdom	109,513.0.04	131,195.3.82
Germany	57,036.4.72	118,722.0.91
Belgium	19,054.8.57	32,723.3.28
Italy	12,644.0.43	17,376.5.11
France	8,662.1.58	15,928.0.18
Spain	514.6.84	1,683.1.19
United States	5,961.8.94	1,409.0.07
Other countries		2,081.1.65
Total	213,387.1.12	321,118.6.21
Linen, hemp, jute, and other textile fibers and manufactures:		
United Kingdom	51,257.2.15	57,545.1.20
British India	18,282.2.80	38,772.1.98
Germany	6,410.3.25	11,411.8.37
Australia	4,035.0.60	8,636.7.80
France	3,306.6.99	4,133.3.90
Belgium	2,840.3.30	3,493.4.15
United States	1,055.0.99	2,871.7.74
Spain		2,135.4.33
Italy	2,330.2.82	2,113.9.40
Chile	3,354.2.80	1,420.7.88
Other countries	868.9.95	246.4.11
Total	93,740.5.65	132,781.0.96
Silk, animal and vegetable, and manufactures:		
Germany	24,894.9.47	33,145.5.62
United Kingdom	13,076.0.26	13,725.9.31
France	11,943.3.99	13,144.2.81

	1910.	1911.
Silk, animal and vegetable—Continued.		
Italy.....	£4,837.1.87	£4,142.6.67
Belgium.....	1,526.5.21	3,911.6.39
Hongkong.....		2,137.4.53
Japan.....		1,180.8.70
United States.....		996.7.77
Other countries.....	5,465.9.37	826.8.66
Total.....	61,744.0.17	73,212.0.46
Hides, skins, and leather goods:		
United Kingdom.....	12,117.4.51	33,524.5.31
United States.....	7,702.4.34	28,571.3.44
Germany.....	8,369.9.68	20,733.3.48
France.....	2,869.9.75	10,814.2.51
Japan.....		4,688.0.13
Italy.....		2,208.7.25
Spain.....		949.3.62
Other countries.....	3,691.6.72	2,860.9.07
Total.....	34,781.4.98	104,350.4.81
Wearing apparel and notions:		
Italy.....	22,346.4.06	9,803.3.29
France.....	25,577.8.96	5,377.5.73
Germany.....	24,411.7.91	2,563.3.89
United Kingdom.....	53,212.6.02	2,213.2.75
United States.....	11,935.7.96	479.1.27
Other countries.....	29,891.4.04	723.1.82
Total.....	167,375.8.95	21,159.8.75
Furniture:		
Germany.....	11,009.2.61	10,175.3.91
United States.....	8,266.0.72	9,248.0.86
United Kingdom.....	9,043.2.35	8,818.3.86
France.....	2,223.3.94	4,546.3.74
Hongkong.....		933.3.90
Other countries.....	1,382.1.01	1,546.4.15
Total.....	31,924.0.63	35,268.0.42
Metals and manufactures of:		
United Kingdom.....	261,124.5.79	400,490.4.82
United States.....	102,441.6.29	324,597.2.99
Germany.....	42,242.5.72	126,629.5.32
Belgium.....	33,944.6.48	100,842.6.03
France.....	7,585.2.43	37,572.0.53
Brazil.....		5,019.3.00
Italy.....		3,889.6.37
Other countries.....	1,881.1.10	102,551.3.94
Total.....	449,199.7.81	1,001,502.3.00
Stones, earths, coal, glass and china ware:		
United Kingdom.....	55,913.5.03	192,328.8.48
Germany.....	29,353.5.38	97,863.4.33
Belgium.....	13,964.7.01	48,808.4.71
United States.....	10,670.5.43	26,201.2.68
Australia.....	5,531.6.28	12,248.8.84
France.....	3,119.8.65	12,392.7.72
Chile.....		6,821.5.58
Japan.....		6,578.4.89
Italy.....		2,886.1.88
Other countries.....	3,538.1.53	2,598.5.11
Total.....	122,091.9.29	408,728.4.22
Woods, lumber and manufactures:		
United States.....	66,316.4.75	314,536.1.01
Chile.....	3,580.6.56	10,076.2.85
Germany.....	3,120.8.63	10,919.2.23
Ecuador.....	3,300.8.11	7,405.5.35
France.....		4,920.0.95
Japan.....		3,617.0.38
United Kingdom.....		3,301.1.65
Hongkong.....	3,562.9.44	1,837.7.15
Belgium.....		1,233.1.72
Spain.....		1,170.5.58
Italy.....		1,150.3.11
Other countries.....	9,971.2.02	2,705.7.55
Total.....	89,852.9.51	362,872.9.53

	1910	1911
Paints, dyes, varnishes, bitumen, gums:		
United States.....	£43,810.5.47	£100,924.1.62
Germany.....	13,892.9.46	45,937.2.52
United Kingdom.....	12,823.5.56	31,288.7.32
Belgium.....	3,377.2.47	14,853.6.91
Salvador.....	3,285.6.00	9,003.4.86
Mexico.....		4,677.1.14
France.....		3,988.3.92
Italy.....		1,329.0.72
Other countries.....	2,573.0.49	1,015.3.83
Total.....	79,792.9.45	213,015.2.84
Live animals:		
Chile.....	2,073.4.49	9,129.5.00
Ecuador.....		2,115.0.00
United States.....		1,092.2.50
Germany.....		680.0.00
United Kingdom.....		359.8.00
Other countries.....	7,237.4.68	160.0.00
Total.....	9,310.9.17	13,536.5.50
Stationery, paper, and cardboard:		
Germany.....	31,763.6.25	86,900.8.34
Spain.....	4,457.6.51	22,296.2.93
United Kingdom.....	7,332.4.40	20,301.3.80
United States.....	9,623.9.58	19,966.3.37
Belgium.....	5,841.6.44	11,807.3.17
France.....	3,433.1.08	7,603.5.01
Italy.....	3,014.0.■■	5,417.8.40
Hongkong.....		1,069.0.26
Other countries.....	1,002.2.93	1,233.8.30
Total.....	66,468.8.01	176,596.3.57
Tools, ships' stores, machines, and vehicles:		
United States.....	89,748.4.11	154,087.3.90
United Kingdom.....	55,304.7.24	166,403.6.61
Germany.....	15,955.2.65	46,338.7.07
Belgium.....	7,333.1.53	35,517.6.25
France.....	11,918.5.20	10,121.9.81
Italy.....		2,411.2.85
Hongkong.....		935.1.10
Other countries.....	3,504.7.58	2,200.0.43
Total.....	183,764.8.31	418,015.8.02
Musical instruments:		
Germany.....	4,107.8.83	15,609.8.55
United States.....	1,631.9.76	6,274.8.27
United Kingdom.....		2,337.9.55
France.....		1,130.4.35
Other countries.....	1,680.1.42	2,908.6.43
Total.....	7,420.0.01	28,281.7.15
Arms, ammunition, and explosives:		
Germany.....	3,562.3.38	35,379.8.38
United Kingdom.....	13,814.8.64	25,450.6.58
United States.....	8,082.1.51	21,025.2.68
France.....		15,734.1.64
Hongkong.....	5,550.5.40	11,887.1.32
Belgium.....		1,843.9.68
Other countries.....	7,144.9.79	1,861.3.76
Total.....	38,154.8.72	113,182.4.02
Dry goods and miscellaneous articles:		
United Kingdom.....	530,860.3.31	69,152.7.17
Germany.....	306,258.6.02	52,504.6.29
United States.....	370,279.9.66	42,286.7.68
France.....	307,310.4.71	29,370.9.45
Chile.....	29,451.1.94	27,621.4.85
Belgium.....	115,382.3.23	19,776.9.13
Cuba.....	7,269.9.43	16,038.9.11
Italy.....	12,856.1.51	3,598.6.44
Mexico.....		3,292.6.25
Ecuador.....	11,332.2.06	2,451.6.87
Japan.....		2,427.1.19
Hongkong.....	8,703.6.38	1,937.9.24
Spain.....	7,675.6.27	1,028.4.93
Other countries.....	32,220.2.01	680.8.54
Total.....	1,739,630.6.55	272,729.7.14

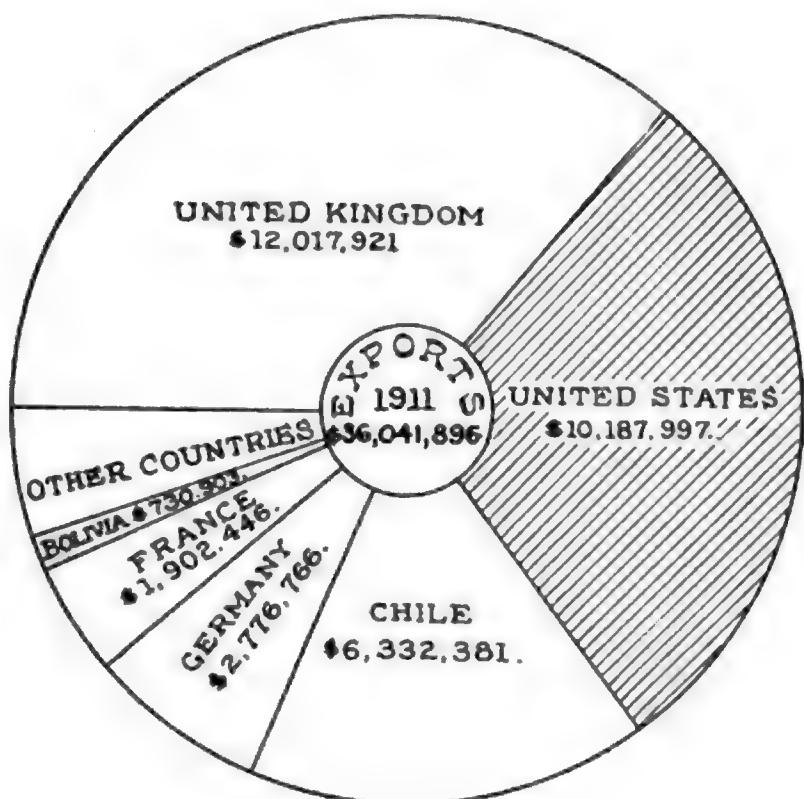
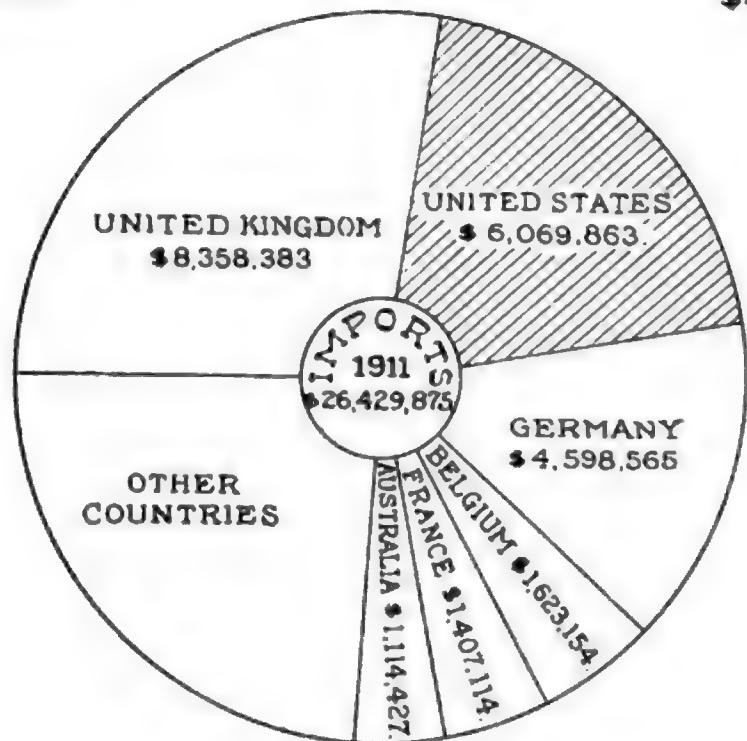
PERU

· COMMERCE · 1912

IMPORTS
\$25,066,354

\$70,937,857

EXPORTS
\$45,871,503.



PAN AMERICAN UNION

	1910	1911
Beverages:		
France.....	£33,025. 1. 60	£35,724. 9. 48
Germany.....	18,093. 0. 87	17,927. 0. 82
United Kingdom.....	16,927. 6. 77	24,393. 6. 78
Portugal.....	14,271. 4. 02	13,097. 1. 62
Italy.....	9,339. 7. 50	8,908. 2. 19
Spain.....	6,559. 1. 11	10,526. 0. 84
Belgium.....	5,160. 8. 30	5,223. 0. 71
United States.....	3,369. 0. 90	2,123. 8. 12
Hongkong.....		860. 3. 70
Other countries.....		382. 3. 95
Total.....	8,780. 9. 09	119,166. 8. 21
Comestibles and condiments:		
Australia.....	164,726. 9. 00	208,340. 1. 05
Hongkong.....	104,264. 9. 47	128,798. 4. 28
United States.....	112,495. 7. 78	116,802. 4. 33
United Kingdom.....	76,143. 9. 61	66,353. 0. 37
Germany.....	70,938. 3. 94	56,237. 9. 01
Italy.....	37,548. 5. 80	38,134. 8. 25
Chile.....	102,282. 2. 24	19,508. 6. 23
France.....		18,348. 9. 27
Belgium.....	7,822. 7. 15	12,204. 8. 76
Spain.....		8,333. 7. 52
Portugal.....	11,539. 1. 68	5,791. 8. 61
Brazil.....		2,945. 2. 19
Japan.....		1,569. 8. 12
Other countries.....		1,319. 8. 82
Total.....	734,464. 7. 35	684,679. 6. 80
Medicines and pharmaceutical products:		
United States.....	24,405. 2. 15	43,755. 2. 61
Germany.....	26,990. 3. 48	43,210. 3. 70
France.....	15,639. 1. 20	36,488. 1. 22
United Kingdom.....	29,707. 4. 77	29,580. 8. 59
Italy.....	10,213. 4. 37	11,054. 7. 32
Belgium.....		2,668. 9. 95
Hongkong.....		2,121. 7. 35
Other countries.....		10,048. 6. 53
Total.....	113,298. 5. 40	178,958. 7. 27
Articles not classified:		
Germany.....		3,334. 0. 34
United Kingdom.....		3,074. 9. 17
United States.....	19,459. 9. 40	3,026. 3. 54
France.....	10,527. 3. 41	1,540. 5. 50
Other countries.....	10,777. 0. 85	2,235. 2. 31
Total.....	40,764. 9. 66	13,211. 9. 86

Imports by customhouses for the years 1910 and 1911 were as follows:

Customhouses.	1910	1911
Callao.....	£2,977,580. 0. 05	£3,416,495. 0. 96
Iquitos.....	903,708. 7. 29	455,127. 2. 99
Mollendo.....	467,066. 3. 43	625,202. 9. 75
Salaverry.....	192,212. 1. 07	276,291. 9. 19
Paita.....	171,387. 9. 78	286,461. 6. 29
Eten.....	126,220. 6. 66	165,970. 8. 40
Pisco.....	78,310. 6. 69	125,910. 6. 29
Pacasmayo.....	56,751. 4. 82	78,165. 2. 96
Ilo.....	4,168. 1. 09	4,087. 5. 11
Buena Vista.....	3,000. 4. 00	1,967. 9. 16
Madre de Dios.....	155. 2. 71	2. 00
Puno.....	77. 7. 79	132. 4. 33
Tumbes.....	41. 7. 50	
Anconmarca.....	15. 2. 80	29. 5. 60
Letitia.....		1,731. 5. 99
Agency of customhouse.....		671. 0. 66
Total libras.....	4,980,697. 1. 68	5,438,245. 9. 69
United States (gold).....	\$24,206,188. 24	\$26,429,875. 00

¹ These figures are read 2,977,580 libras, or pounds, 6 soles and 5 centimos.

EXPORTS.

The following table shows the exports by countries for the years 1909, 1910, and 1911:

Countries.	1909	1910	1911
United Kingdom.....	\$12,988,546	\$12,234,119	\$12,017,921
United States.....	7,268,728	9,878,327	10,187,997
Chile.....	4,138,507	4,349,608	6,332,381
Germany.....	1,701,449	1,740,893	2,776,766
France.....	2,620,225	3,750,560	1,902,446
Bolivia.....	988,069	970,055	730,903
Belgium.....	205,057	516,186	494,050
Spain.....	215,705	344,774	299,471
Canada.....		62,264	224,368
Ecuador.....	90,563	70,282	248,004
Australia.....			130,189
Uruguay.....			119,897
Arica, Chile.....	119,007	174,183	118,158
Panama.....	95,143	133,222	107,529
Colombia.....	15,943	62,814	76,380
Italy.....	4,139	5,485	13,210
Japan.....	418,148	106	2,202
Barbados.....		219	1,896
Argentina.....	38,990	10,070	.....
Netherlands.....	70,870	2,932	.....
Santa Lucia (West Indies).....	341,979	.....	.....
Other countries.....	233,311	73,910	257,438
Total.....	31,554,379	34,380,009	36,041,896

The following table shows the exports of Peru, exclusive of minerals, for the years 1909 and 1910:

Articles.	1909	1910
Sugar.....	£1,148,458.3.54	£1,382,151.4.89
Rubber.....	1,137,657.8.68	1,278,673.7.85
Cotton.....	1,206,988.1.47	1,014,822.5.79
Wool, alpaca.....	255,688.1.35	265,757.0.44
Guano.....	155,224.5.72	181,582.2.00
Wool, sheep.....	97,941.0.27	145,388.4.90
Straw hats.....	93,828.5.20	121,078.0.54
Petroleum.....	147,497.3.68	109,615.2.23
Hides.....	73,820.0.77	90,744.9.39
Wool, llama.....	40,719.2.00	70,702.9.17
Cocaine.....	60,287.5.35	69,151.5.75
Rice.....	59,908.1.57	46,234.1.46
Goatskins.....	56,103.3.42	33,754.8.69
Cottonseed cake.....	23,013.6.30	27,157.0.19
Shirtings.....		26,064.8.72
Pepper.....		25,164.0.80
Coffee.....	16,087.2.45	23,228.6.64
Cotton seed.....	15,598.2.48	21,659.8.80
Cocoa.....	19,614.1.92	20,337.5.03
Alfalfa seed.....		18,851.2.29
Salt.....	3,261.2.80	12,956.5.70
Charcoal.....	7,035.1.70	10,682.0.80
Fruits, fresh and dried.....	6,189.0.84	9,548.2.41
Ivory nuts.....		9,325.9.00
Cattle.....	3,143.0.00	8,548.1.00
Alcohol.....	7,379.4.82	7,493.2.88
Chuño.....		7,434.8.91
Gasoline.....	3,240.5.49	7,408.2.34
Raw sugar (chanosca).....	11,440.6.38	7,260.1.24
Condurango.....		6,788.4.16
Horns of cattle.....		5,833.2.95
Chalonas.....		4,829.7.34
Parchment.....	1,175.9.11	4,777.4.73
Bran.....	4,500.0.00	4,746.0.00
Vegetables and garden stuff.....	34,385.7.62	4,391.0.82
Rhatany root.....		4,171.5.10
Live animals.....	9,798.3.00	3,868.6.00
Onions.....		3,772.8.21
Tallow.....		3,232.2.82

Articles.	1909	1910
Cacao.....	£8,852.5.86	£3,200.5.93
Cottonseed oil.....	2,469.2.75	2,738.6.77
Yarn.....	2,651.5.79	2,215.5.60
Butter.....	2,308.2.14	2,003.3.34
Olives.....		1,976.6.02
Wheat flour.....	202.7.93	1,840.1.51
Honey.....	1,305.6.85	1,550.7.05
Wines.....	7,136.2.13	1,304.9.25
Beeswax.....	1,048.9.94	1,288.3.38
Indian corn.....	76.7.24	1,224.6.39
Horsehair.....	1,128.2.53	1,094.0.00
Barley.....		1,044.6.14
Meats.....	8,275.6.35	
Cotton textiles.....	36,850.5.81	
All other exports.....	57,010.2.94	30,946.0.24
Total.....	4,829,246.6.19	5,151,616.2.60

The following table shows the exports of minerals for the years 1909 and 1910:

	1909	1910
Silver and copper bars.....		£635,852.3.31
Copper and silver bars.....		600,841.6.28
Copper and silver matte.....	£164,761.9.76	130,915.3.90
Copper and silver ore.....		123,698.1.30
Silver sulphide.....	73,401.2.81	92,088.1.68
Vanadium.....	69,962.8.40	91,911.2.60
Borate of lime.....	74,318.2.08	73,169.9.11
Silver and lead ore.....	13,647.5.41	37,516.7.47
Silver bars.....	47,516.0.26	32,148.1.26
Copper ore.....	63,218.8.70	29,749.4.48
Silver ore.....	50,380.1.28	24,477.7.35
Copper matte.....	15,439.3.66	10,348.4.70
Copper, lead, and silver matte.....		5,591.3.73
Copper, old.....	4,005.4.50	4,732.4.72
Lead ore.....	3,553.9.45	3,976.0.85
Silver and copper sulphide.....	1,703.6.82	3,311.2.96
Gold, silver, and copper ore.....	482.5.14	3,051.6.04
Silver and copper ore.....	60,769.4.01	
Copper bars.....	967,830.4.95	
All other.....	52,332.3.78	19,084.6.76
Total.....	1,663,424.1.01	1,922,459.8.51

The exports of minerals by countries, for the years 1909 and 1910, were as follows:

	1909	1910
United States.....	£1,075,995.8.40	£1,406,663.5.93
United Kingdom.....	462,046.9.57	388,792.9.40
Germany.....	107,138.2.02	102,194.9.10
Belgium.....	247.3.16	18,435.7.41
France.....	1,505.5.28	2,702.0.17
Other countries.....	16,490.2.58	3,670.0.50
Total.....	1,663,424.1.01	1,922,459.8.51

According to the "Boletín de Aduanas" the exports for the year 1911, including minerals, were:

Articles.	1911
Cotton.....	£1,028,254.3.15
Rice.....	82,460.1.00
Sugar.....	1,456,364.9.22
Copper bars.....	570,090.0.00
Copper and silver bars.....	640,813.4.40
Silver bars.....	45,310.2.88
Borate of lime.....	67,926.0.00
Coffee.....	50,831.6.25
Charcoal.....	21,092.6.66
Cocoa.....	54,529.2.07
Cocaine.....	75,402.2.99
Hides.....	107,890.2.54
Raw sugar (chancaca).....	102,834.7.34
Gasoline.....	224,489.2.68
Rubber.....	537,087.1.56
Guano.....	278,388.0.00
Vegetables and garden stuff.....	20,445.7.81
Wools.....	405,288.2.10
Copper matte.....	27,299.5.70
Copper and silver matte.....	46,293.1.70
Argentiferous copper matte.....	162,342.0.00
Copper ore.....	81,632.4.44
Copper and silver ore.....	77,849.9.80
Silver ore.....	57,624.4.54
Lead ore.....	32,481.9.00
Cottonseed cake.....	47,368.6.80
Petroleum.....	174,530.7.00
Skins.....	35,335.4.74
Straw hats.....	441,317.5.00
Silver sulphide.....	112,384.7.02
All other exports.....	350,097.1.39
Total.....	7,416,027.9.78
Value United States gold.....	\$36,041,896

The exports by customhouses for the years 1910 and 1911 were:

	1910	1911
Callao.....	£2,894,941.4.40	£3,189,460.3.18
Iquitos.....	1,121,501.3.93	496,189.4.55
Salaverry.....	834,228.0.70	891,027.9.20
Mollendo.....	765,727.0.78	623,017.6.40
Paita.....	529,295.1.92	1,210,161.3.20
Eten.....	367,127.5.03	514,348.3.95
Pisco.....	266,387.1.73	260,311.6.36
Agency of customhouse.....	132,650.1.94	64,082.2.42
Pacasmayo.....	63,877.6.48	92,845.1.56
Puno.....	30,539.4.71	42,320.9.01
Ancomarca ¹	17,066.0.32	.....
Tumbes ¹	14,625.4.56	.....
Ilo ¹	12,388.9.39	.....
Buena Vista ¹	12,242.8.92	.....
Madre de Dios ¹	11,477.6.30	.....
All others.....	.....	32,262.9.95
Total libras.....	7,074,076.1.11	7,416,027.9.78
United States (gold).....	\$34,380,009.90	\$36,041,896.00

¹This figure is read 2,894,941 libras or pounds, 4 sols, and 40 centimos.

²In 1911, included under "All others."



COMMERCE OF URUGUAY FOR 1912 :: :: ::

THE foreign commerce of Uruguay for the year 1912, according to the message of President Batlle y Ordóñez to the General Assembly of February 15, 1913, amounted to 100,380,000 pesos, of which 49,380,000 pesos were imports, and 51,000,000 pesos were exports. The foreign trade for the preceding year was: Imports, 44,798,175 pesos; exports, 44,536,573 pesos; total, 89,334,748 pesos.

Estimating the Uruguayan peso at \$1.04 United States gold, the value of the foreign trade for the year 1912 was: Imports, \$51,355,200; exports, \$53,040,000; total, \$104,395,200. For the preceding year the values were: Imports, \$46,590,102; exports, \$46,318,036; total, \$92,908,138. There was, therefore, an increase for the year 1912 as compared with the preceding year of \$4,765,098 in imports and of \$6,721,964 in exports, or a total increase of \$11,487,062.

IMPORTS.

The following statements of the imports by countries and groups of articles for the year 1911 are taken from the Bulletin of the National Office of Commercial Statistics. As this is the first official publication for several years of details of imports covering a period of a whole year, comparison with previous years is impossible.

Imports by countries, 1911.

United Kingdom.....	\$12,648,379	Chile.....	\$312,828
Germany.....	7,894,644	Australia.....	297,341
United States.....	5,671,318	Netherlands.....	242,552
Argentina.....	4,173,155	Cuba.....	186,004
Belgium.....	3,333,938	Paraguay.....	166,601
France.....	3,952,473	Austria-Hungary.....	116,079
Italy.....	3,348,233	Portugal.....	31,567
Spain.....	2,143,455		
Brazil.....	2,071,535	Total.....	46,590,102

Imports by groups of articles, 1911.

	Pesos.		Pesos.
Food products.....	8,513,400	Metals and manufactures (other than iron and steel).	720,933
Textiles and manufactures...	8,372,090	Paints, dyes, inks, etc....	363,829
Iron, steel, and manufactures.	5,170,149	Hides, skins, and manufac- tures.....	295,755
Stone, glass, chinaware, etc...	4,970,166	Nondutiable articles.....	2,670,519
Woods and manufactures.....	2,826,384	Miscellaneous.....	2,844,499
Beverages.....	2,139,022		
Oils.....	1,399,125	Total.....	44,798,175
Chemical products.....	1,378,658	Value in United States gold.....	\$46,590,102
Tobacco.....	1,271,020		
Paper and manufactures.....	992,127		
Live animals.....	870,499		

According to the report of Consul Frederic W. Goding, Montevideo, the imports by quantities for the year 1912 were as follows: Foods and drinks, 122,238 tons; general merchandise, 275,772 tons; salt, 49,846 tons; coal, 619,857 tons; inflammables, 36,099

tons; machinery, 15,165 tons; fire wood, 6,499 tons; charcoal, 12,869 tons. Construction materials: Lumber, 145,018 tons, including 38,000,000 feet of yellow pine, 21,000,000 feet of white pine, 20,000,000 feet of spruce, and 4,000,000 feet of redwood. Iron and steel, 62,350 tons; cement, 63,436 tons; tiles, 8,849 tons; other materials, 21,952 tons. Live-stock products: Jerked beef, 27,629 tons; hides, wet, 6,049 tons; dry, 2,571 tons; sheepskins, 661 tons; wool, 3,035 tons; horsehair, 151 tons; tallow, grease, etc., 6,501 tons. Agricultural products: Wheat, 12,466 tons; corn, 8,919 tons; linseed, 1,996 tons; other agricultural products, 21,091 tons.

FOOD PRODUCTS.

Food products are divided into the following classes:

	Pesos.
Animal products.....	482, 290
Vegetable products:	
Oils.....	709, 545
Fruits.....	355, 775
Spices and other condiments	2, 483, 522
Vegetables and cereals.....	2, 116, 621
Substances for infusions and drinks.....	1, 900, 064
Flour, paste, etc.....	465, 583
 Total.....	 8, 513, 400

The principal animal food products imported in 1911 were: Cheese, 109,205 pesos; codfish, 87,399 pesos; sardines, 87,511 pesos; ham, 46,632 pesos; canned goods, 86,153 pesos; and condensed cream, 42,301 pesos.

Under vegetable products, the principal imports were: Olive oil, 440,839 pesos; cottonseed oil, 258,934 pesos; fruits, 355,775 pesos; sugar, refined, 400,375 pesos, unrefined, 1,848,067 pesos; catsup, 49,613 pesos; rice, 612,589 pesos; oats, 67,590 pesos; Indian corn, 305,581 pesos; potatoes, 940,544 pesos; peas, 108,681 pesos; canned vegetables, 18,363 pesos; chickpeas, 36,023 pesos; yerba maté, 1,188,983 pesos; coffee, 351,129 pesos; chocolate, 124,903 pesos; tea, 137,763 pesos; malt, 135,620 pesos; starch, 21,351 pesos; confectionery, 52,291 pesos; wheat, 105,404 pesos; crackers, 37,993 pesos.

TEXTILES AND MANUFACTURES THEREOF.

This heading is divided into subheads, as follows: Cotton, 5,163,537 pesos; linen, 239,796 pesos; wool, 1,705,703 pesos; silk, 305,856 pesos; other fibers, 957,198 pesos; total, 8,372,090 pesos.

The principal imports under cotton were: Bedspreads, 59,228 pesos; collars and cuffs, 35,015 pesos; laces, 48,242 pesos; flannel, 487,358 pesos; blankets, 75,341 pesos; spool thread, 215,407 pesos; canvas, 80,529 pesos; stockings, 360,847 pesos; handkerchiefs, 114,421 pesos; ready-made clothing, 115,028 pesos; piece goods, 2,923,318 pesos.

Under linen textiles the principal imports were: Piece goods, all linen, 67,244 pesos; part linen, 52,030 pesos. Laces, part linen, 28,760 pesos; napkins and doilies, all linen and part linen, 23,125 pesos.

Under wool the principal imports were: Knitted shirts, 30,259 pesos; caesimere, all wool, 430,188 pesos; part wool, 220,879 pesos; part silk, 54,890 pesos. Felt, 11,359 pesos. Blankets, all wool, 19,503 pesos; wool mixed, 24,652 pesos. Stockings, all wool, 6,788 pesos; part wool, 13,657 pesos. Cloth, fine, all wool, 38,439 pesos; mixed, 20,892 pesos. Other cloth, all wool, 99,537 pesos; mixed, 211,175 pesos. Ready-made clothing, all wool, 48,447 pesos; mixed, 60,941 pesos. Worsteds, 21,843 pesos. Hats, felt, 124,512 pesos; woolen, 20,810 pesos. Plush, 61,793 pesos.

Under silk the principal imports were: Ribbons, all silk, 40,003 pesos; part silk, 11,243 pesos. Neckties, all silk, 17,657 pesos; part silk, 10,310 pesos. Crêpe, 21,267 pesos. Handkerchiefs, all silk, 13,560 pesos; part silk, 4,764 pesos. Ready-made

clothing, all silk, 10,564 pesos; part silk, 12,120 pesos. Piece goods, all silk, 43,859 pesos; part silk, 57,556 pesos. Thread, 12,120 pesos.

Under other fibers the principal imports were: Burlap, 395,464 pesos; twine for binding and like uses, 216,671 pesos. Jute thread, 19,518 pesos; oilcloth, 26,836 pesos; canvas, 21,868 pesos; waterproof cloth, 14,055 pesos; jute cloth, 52,268 pesos; jute, unmanufactured, 38,764 pesos; manila rope, 60,744 pesos.

IRON, STEEL, AND MANUFACTURES.

This heading is divided into subheads, as follows: Primary and relatively primary material, 3,395,104 pesos; machinery and agricultural implements, 531,076 pesos; machinery and implements for the trades, 610,019 pesos; other manufactures, 628,950 pesos.

Under the first subhead the principal imports were: Fence wire, 815,699 pesos; other wire, 11,769 pesos. Steel in bars and sheets, 16,167 pesos; steel for mines, 13,591 pesos; spare parts for industrial machinery, 164,467 pesos. Axle boxes, 17,270 pesos. Nails, all kinds, 37,436 pesos; axles, 27,972 pesos. Hoops, 73,346 pesos. Iron, in bars and sheets, 670,996 pesos; iron ingots, 18,573 pesos. Galvanized iron, in bars and sheets, 139,383 pesos; for roofs, 665,736 pesos. Carriage springs, 73,207 pesos; rails, 51,922 pesos; wire cloth, 11,724 pesos; beams, 533,857 pesos; screws and nuts, 48,198 pesos.

Under agricultural machinery and implements the principal imports were: Plows, 131,162 pesos; steam plows, 11,450 pesos; thrashing machines, 77,770 pesos; reapers and binders, 66,440 pesos; machinery not specified, 16,922 pesos. Spare parts for machinery, 44,407 pesos; motors, gasoline and benzine, 13,710 pesos; motors, steam, 18,573 pesos; rakes, 14,709 pesos; picks, 11,773 pesos; farm tools not specified, 26,538 pesos.

Under machinery and implements for the trades the principal imports were: Axes, 11,165 pesos; tools not specified, 92,452 pesos; sawing and planing machinery, 29,376 pesos; sewing machines, 78,498 pesos; typewriters, 24,442 pesos; machinery for forges, 31,472 pesos; for windmills, 8,107 pesos; machinery not classified, 69,926 pesos. Windmills, 13,335 pesos; motors, benzine and gasoline, 15,480 pesos; motors, steam, 50,980 pesos; electric motors, 34,767 pesos.

Under other manufactures of iron and steel the principal imports were: Scales, 18,937 pesos; cooking utensils, 31,998 pesos; boxes, 28,390 pesos; cash registers, 9,262 pesos; pipes, iron, 79,633 pesos; pipes, galvanized iron, 78,318 pesos. Ranges, 24,705 pesos. Cutlery, 60,765 pesos; enameled ware, 144,335 pesos; ware not specified, 43,849 pesos; sheep shears, 16,895 pesos.

STONE, GLASS, CHINAWARE, ETC.

This heading is divided into two subheads, viz., primary and relatively primary material, 4,078,381 pesos, and manufactures, 891,785 pesos.

Under the first subhead the principal imports were: Coal, 2,636,635 pesos; sulphur, 76,920 pesos; mirrors, finished, 81,345 pesos; unfinished, 50,239 pesos; marble, worked or dressed, 16,311 pesos; in block, 64,203 pesos; cement, Portland, 943,538 pesos; Roman, 21,958 pesos; window glass, 64,236 pesos; chalk, 50,636 pesos.

Under the subhead manufactures the principal imports were: Pottery, 18,442 pesos; glazed tiles, 80,756 pesos; common tiles, 98,142 pesos; mosaic, 50,267 pesos; piping, clay, 104,667 pesos; glass bottles, 70,488 pesos; glass flasks, 23,092 pesos; chinaware, 180,333 pesos; porcelain, 57,451 pesos; glass lamp chimneys, 21,148 pesos; glassware, not classified, 139,800 pesos.

WOODS AND MANUFACTURES.

This heading is divided into two subheads, viz., primary and relatively primary material, 2,301,126 pesos, and manufactures, 525,278 pesos.

Under the first subhead the principal imports were: Boxes and cases, knocked down, 45,106 pesos; casks, knocked down, 47,357 pesos; sleepers, 113,618 pesos; hardwood, 77,602 pesos; wicker, 24,567 pesos; molding, 28,709 pesos; wood pulp, 52,327 pesos; poles for ship building, 45,204 pesos; pine, 1,542,947 pesos; posts, 183,295 pesos; corks, 19,962 pesos; beams, 56,655 pesos.

Under manufactures the principal imports were: Accordeons, 16,385 pesos; pianos, 121,520 pesos; other musical instruments and parts, 16,339 pesos; carriages, 53,452 pesos; straw hats, 32,592 pesos; furniture, 248,886 pesos.

BEVERAGES.

This heading is divided into three subheads: Spirits and liqueurs, 469,530 pesos; wines, 1,616,494 pesos; other beverages, 52,998 pesos.

The principal imports under spirits and liqueurs were: Bitters, 65,216 pesos; aguardiente, 179,380 pesos; cognac, 102,281 pesos; fernet, 31,691 pesos; liqueurs, 25,483 pesos; whisky, 31,694 pesos.

The principal imports under wines were: Wine, common, 1,309,004 pesos; medium, 38,088 pesos; fine, 17,649 pesos; sherry, 15,731 pesos; port, 20,528 pesos; vermouth, 88,279 pesos.

Under other beverages the principal imports were: Mineral waters, 22,010 pesos; beer, 20,396 pesos.

OILS.

The principal imports under this heading were: Lubricating oils, 124,200 pesos; turpentine, 41,854 pesos; benzine, 272,727 pesos; gasoline, 43,278 pesos; and kerosene, 82,485 pesos.

CHEMICAL PRODUCTS.

Under this heading the principal imports were: Sulphuric acid, 28,830 pesos; calcium carbide, 19,545 pesos; stearin candles, 11,852 pesos; chlorate of potash, 12,100 pesos; dynamite, 35,776 pesos; drugs, not classified, 284,929 pesos; pharmaceutical specialties and druggists' supplies, 74,076 pesos; stearin, 35,193 pesos; glucose, 18,759 pesos; soap, fine, 16,627 pesos; paraffin, 15,581 pesos; perfumery, 148,642 pesos; rosin, 59,877 pesos; sea salt, 264,945 pesos; soda, common, 43,125 pesos; bicarbonate of soda, 69,848 pesos; sulphate of copper, 31,592 pesos; medicinal wines, 18,822 pesos.

TOBACCO.

Principal imports under this head were: Habana cigars, 33,921 pesos; other cigars, 84,671 pesos; tobacco extract (sheep dip), 816,934 pesos. Leaf tobacco: Bahia, 98,047 pesos; Philippine, 30,684 pesos; Habana, 62,857 pesos; Jamaica, 23,067 pesos; Paraguayan, 53,927 pesos; twisted tobacco, black, 46,228 pesos.

PAPER AND MANUFACTURES.

This heading is divided into two subheads: Paper and cardboard, 838,719 pesos, and manufactures, 153,408 pesos.

Under the first subhead the principal imports were: Pasteboard, 72,746 pesos; cardboard, 18,964 pesos; cigarette paper, 71,179 pesos; writing paper, 18,268 pesos; print paper, 538,196 pesos; wrapping paper, 46,230 pesos; paper and envelopes, 42,556 pesos.

Under manufactures the principal imports were: Blank books, 11,092 pesos; printed books; bound, 84,225 pesos; unbound, 42,773 pesos.

LIVE ANIMALS.

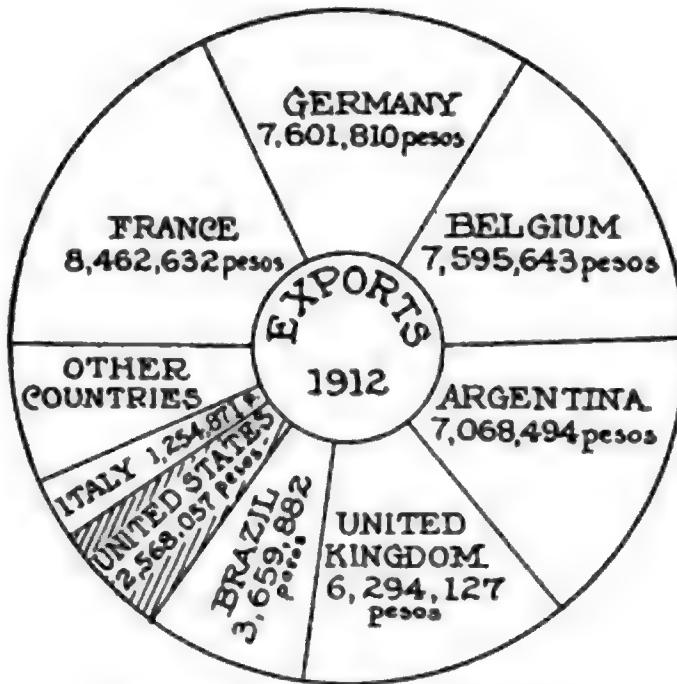
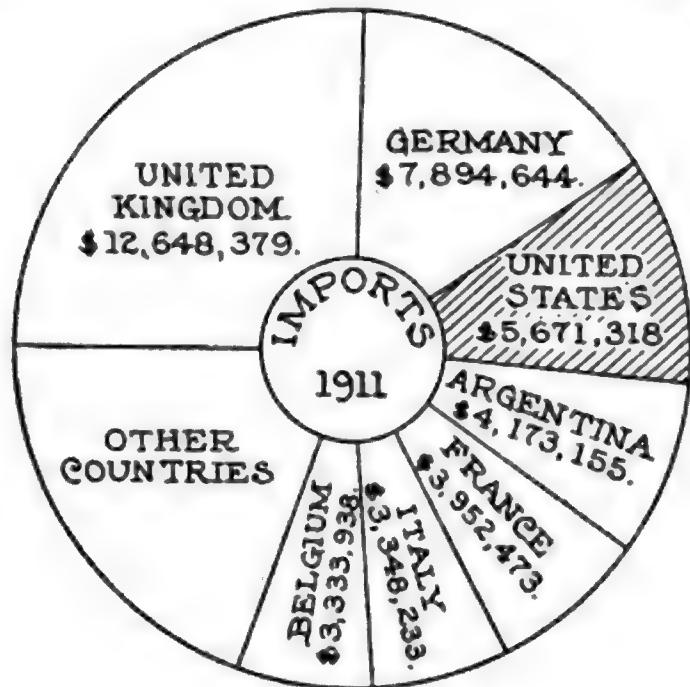
The principal live animal imports were: 44,375 horned cattle, worth 318,548 pesos; 1,078 sheep, worth 283,400 pesos; and 340 horses, worth 169,700 pesos.

URUGUAY COMMERCE-1912

IMPORTS
\$51,355,200.

\$ 104,395,200.

EXPORTS
\$53,040,000.



(PESO = \$1.04 U.S. GOLD)

PAN AMERICAN UNION

METALS OTHER THAN IRON AND STEEL, AND MANUFACTURES OF.

This heading is divided into subheads, as follows: Primary and relatively primary articles, 312,382 pesos, and manufactures, 408,551 pesos.

The principal imports under the first subhead were: Copper in sheets, 46,143 pesos; tin, 181,575 pesos; zinc, 31,035 pesos; lead, 21,043 pesos.

Under the second subhead the principal imports were: Jewelry, gold, 54,062 pesos; tin boxes, 22,138 pesos; lead tubing, 39,468 pesos; metal caps for bottles, 15,040 pesos; cartridges, loaded, 63,599 pesos; metalwork, 86,574 pesos; mathematical and physical instruments, 15,035 pesos; clocks, 32,818 pesos; printers' type, 13,174 pesos; manufactures of bronze, 12,099 pesos.

PAINTS, DYES, INKS, ETC.

Under this heading the principal imports were: Aniline, 81,414 pesos; Prussian blue, 14,698 pesos; varnish, 26,486 pesos; shoe blacking, 9,134 pesos; extract of quebracho, 28,637 pesos; wood for sawdust, 36,492 pesos; paint in paste, 78,046 pesos; paint in powder, 31,385 pesos; prepared paints, 30,471 pesos.

HIDES, SKINS, AND MANUFACTURES.

The principal imports under this head were: Calfskins, dressed, 30,411 pesos; goatskins, dressed, 77,052 pesos; sheepskins, dressed, 16,180 pesos; boots and shoes, 69,331 pesos; portfolios, 23,459 pesos; belting, 22,614 pesos; manufactures of skin, 21,573 pesos.

MISCELLANEOUS.

Under this heading the principal imports were: Bran, 24,299 pesos; ordnance, 30,155 pesos; manufactures of celluloid, 15,652 pesos; fancy articles, 70,420 pesos; articles of rubber, 55,013 pesos; electric material, 72,592 pesos; 436 automobiles, worth 658,244 pesos; automobile accessories, 54,486 pesos; buttons, 58,797 pesos; charcoal, 148,404 pesos; druggists' sundries, 49,126 pesos; hardware, 368,330 pesos; forage, 136,380 pesos; photographic supplies, 24,999 pesos; lamps, 17,272 pesos; pencils, 11,419 pesos; illuminating material, 79,050 pesos; building material, 19,191 pesos; notions, 379,919 pesos; alfalfa seed, 74,057 pesos; oats, 21,286 pesos; millinery supplies, 33,922 pesos; saddlery supplies, 29,888 pesos; upholsterers' supplies, 19,337 pesos; desk accessories not elsewhere enumerated, 26,606 pesos; unclassified articles, 80,928 pesos; rabbit fur, 25,259 pesos; rubber boots and shoes, 12,825 pesos; combs, 12,995 pesos; shoemakers' supplies, 48,108 pesos.

EXPORTS.

There is no official publication as yet of the details of exports covering the whole year 1911. The exports for the first six months of that year are as follows:

Exports by countries.

	January to July, 1911.		January to July, 1911.
France.....	<i>Pesos.</i> 7,241,479	Russia.....	74,123
Germany.....	5,118,452	Porto Rico.....	48,289
Belgium.....	4,517,662	Sweden.....	17,882
Argentina.....	2,881,557	Paraguay.....	6,207
United Kingdom.....	2,180,686	Netherlands.....	4,587
Brazil.....	1,702,404	Australia.....	4,350
Cuba.....	1,360,574	Trinidad.....	2,751
Italy.....	719,930	Barbados.....	400
United States.....	574,699	Falkland Islands.....	293
Austria-Hungary.....	369,112	Other countries.....	56,179
Spain.....	172,850	Total for 6 months.....	27,283,053
Chile.....	125,745	Total for year.....	44,536,573
Portugal.....	93,833		

According to United States Consul Goding, the exports by countries for 1911 were: France, \$10,060,148; Belgium, \$7,460,044; Germany, \$6,879,394; Argentina, \$5,020,125; United Kingdom, \$4,159,170; Brazil, \$3,347,262; Cuba, \$1,867,573; United States, \$1,656,846; Italy, \$1,369,170; Austria-Hungary, \$792,085; Spain, \$604,681; Chile, \$251,597; Portugal, \$215,308; Russia, \$76,654; Sweden, \$18,480; Paraguay, \$14,409; Netherlands, \$5,363; Peru, \$548; provisions for vessels, \$77,467; total, \$43,876,524.

According to the bulletin of the Office of Commercial Statistics, the exports by countries for the year 1912 were: France, 8,462,632 pesos; Germany, 7,601,810 pesos; Belgium, 7,595,643 pesos; Argentina, 7,068,494 pesos; United Kingdom, 6,294,127 pesos; Brazil, 3,659,882 pesos; Cuba, 933,956 pesos; Italy, 1,254,871 pesos; United States, 2,568,057 pesos; Austria-Hungary, 773,150 pesos; Spain, 620,360 pesos, Chile, 238,103 pesos; Portugal, 1,152,352 pesos; Russia, 148,431 pesos; other countries 146,869 pesos; ships' supplies, 228,845 pesos; total, 48,747,582 pesos; increase by market value, 4,294,273 pesos; grand total, 53,041,855 pesos. This total exceeds the total given in the message of President Battle y Ordóñez.

Exports by major groups.

	January to July, 1911.
	Pesos.
Grazing and meat industry.....	25,531,595
Agriculture.....	601,006
Miscellaneous industries.....	1,036,287
Other exports.....	57,946
Ships' supplies.....	56,179
Total.....	27,283,053

According to report of Consul Goding, the value of the principal exports in 1911 were as follows: Agricultural products: Flour and pastes, \$398,775; fruit and vegetables, \$120,379; grain and seeds, \$491,911; hay, \$42,516; other agricultural products, \$14,964. Game and fish products: Fish, \$4,266; game, \$154,969. Live-stock products: Animals, live, \$817,358; bones and ash, \$196,074; hides, \$273,467; meat and extracts, \$10,315,484; residues, \$7,256,553; tallow, \$162,286; wool, \$1,168,586; other live-stock products, \$20,154,481. Mineral products, \$11,362; earths, \$1,358,810; stones, \$685,415; other products, \$248,868. Total, \$43,876,524; increase by market values, \$3,703,848. Total, \$47,580,372.

The bulletin of the Office of Commercial Statistics gives the exports by major groups for the year 1912 as follows: Grazing and meat industry, 44,037,038 pesos; agriculture, 2,051,324 pesos; hunting and fishing, 107,691 pesos; mine products, 2,189,833 pesos; other products, 132,851 pesos; ships' supplies, 228,845 pesos; increase by market value, 4,294,273 pesos; total, 53,041,855 pesos.

The exports under the heading "Grazing and meat industry" for the half year (1911) were divided into the following classes:

	Quantity.	Value.		Quantity.	Value.
		Pesos.			Pesos.
Live animals..... No..	129,601	451,257	Bones and ash.....		32,121
Horns..... tons..	1,159	43,801	Wool..... tons..	46,909	15,010,897
Meats and extracts.. do..	46,249	4,474,534	Hair and bristles.. do..	290	116,032
Hides and skins.....		4,684,594	Other meat products.....		77,770
Grease and tallow... tons..	6,330	610,965	Total.....		25,531,595
Guano..... do..	1,969	29,534			

For the year 1912 the heading was divided as follows: Live animals, 1,032,612 pesos; meats and extracts, 5,725,630 pesos; grease and tallow, 1,748,912 pesos; wool, 25,900,908 pesos; hides and skins, 8,989,415 pesos; hair and bristles, 217,338 pesos; bones and ash, 191,960 pesos; other products, 11,249 pesos; residuary products, 219,014 pesos; total, 44,037,038 pesos.

Under live animals the exports for the first half of the year 1911 were: 40,984 beeves, worth 336,220 pesos; 85,602 sheep, worth 92,226 pesos; 2,930 horses, worth 21,387 pesos; 35 mules, worth 1,240 pesos; and 50 hogs, worth 184 pesos.

The live animal exports for 1912 were: 77,444 beeves, worth 572,460 pesos; 320,389 sheep, worth 445,392 pesos; 1,658 horses, worth 10,880 pesos; 421 mules, worth 3,368 pesos; 38 hogs, worth 114 pesos; 199 goats, worth 398 pesos.

Under meats and extracts the principal exports for the first half of 1911 were: Jerked beef, 32,364 tons, worth 2,581,100 pesos; canned beef, 3,623 tons, worth 724,667 pesos; beef extract, 254,067 kilos, worth 457,321 pesos; frozen beef, 6,455 tons, worth 387,304 pesos; frozen mutton, 2,937 tons, worth 176,244 pesos; canned tongue, 477,837 kilos, worth 94,970 pesos; beef broth, 147,017 kilos, worth 44,105 pesos.

The principal exports under this heading for the year 1912 were: Jerked beef, 38,250 tons, worth 3,059,984 pesos; canned beef, 2,838 tons, worth 567,599 pesos; beef extract, 300,836 kilos, worth 541,504 pesos; frozen beef, 20,342 tons, worth 1,220,549 pesos; frozen mutton, 1,501 tons, worth 90,058 pesos; canned tongue, 749,845 kilos, worth 149,969 pesos; beef broth, 251,623 kilos, worth 75,487 pesos.

Under hides and skins the exports for the first half of the year 1911 were: Dry sheepskins, 3,898 tons, worth 974,413 pesos; 1,384 salt sheepskins, worth 304 pesos; lambskins, 36,995 kilos, worth 9,249 pesos; 550,492 salt hides, worth 2,752,460 pesos; 259,790 flint same, worth 779,370 pesos; 14,969 salt calfskins, worth 17,962 pesos; 371,271 flint same, worth 92,821 pesos; 11,567 salt unborn calfskins, worth 9,254 pesos; 109,969 kilos flint same, worth 32,990 pesos; 9,438 flint horsehides, worth 10,382 pesos; 2,053 salt same, worth 4,106 pesos; and 773 same with hair, worth 1,283 pesos.

The exports under hides and skins for the year 1912 were: Dry sheepskins, 11,674 tons, worth 2,918,502 pesos; salt akeepskins, 61 tons, worth 23,363 pesos; lambskins, 386,346 kilos, worth 96,586 pesos; salt hides, 818,177, worth 4,060,885 pesos; 528,954 flint same, worth 1,586,862 pesos; 24,537 salt calfskins, worth 29,444 pesos; 834 tons flint same, worth 208,424 pesos; 31,586 salt unborn calfskins, worth 25,269 pesos; 84,329 kilos flint same, worth 25,301 pesos; 12,520 flint horsehides, worth 13,772 pesos.

Under grease and tallow the exports for the first half of 1911 were: 5,686 tons of tallow, worth 540,115 pesos, and 644 tons of grease, worth 70,850 pesos.

The exports of grease and tallow for the year 1912 were: Grease, 1,977 tons, worth 217,447 pesos; tallow, 16,064 tons, worth 1,526,062 pesos.

The principal exports under other meat products for the first half year of 1911 were: 464 tons of salt and dry casings, worth 33,706 pesos; 190 tons hoofs, worth 7,617 pesos; 134 tons of rawhide, worth 5,376 pesos; neat's-foot oil, 47,193 kilos, worth 5,192 pesos; and 12,801 kilos of casein, worth 5,120 pesos.

In 1912 the exports of these products were as follows: 996 tons of salt and dry casings, worth 76,960 pesos; 329 tons hoofs, worth 13,158 pesos; 398 tons of rawhide, worth 15,939 pesos.

In 1912 there were exported 6,424 tons guano, worth 96,355 pesos.

Exports under the heading "Agriculture" for the first half of 1911 were divided into the following classes:

	Quantity.	Value.		Quantity.	Value.
		Pesos.			Pesos.
Oil-producing grains .. tons..	10,441	306,795	Hay and fodder..... tons..	198	4,822
Flours..... do.....	5,130	186,280	Other agricultural products.....		15,214
Vegetables.....		41,788			
Fruits.....		46,107	Total... ..		601,006

For the year 1912 the exports under this heading were: Oil-producing grains, 33,479 tons, worth 886,741 pesos; flours, 23,915 tons, worth 862,978 pesos; vegetables and fruits, 100,112 pesos; hay and fodder, 15,260 tons, worth 193,686 pesos; other agricultural products, 7,807 pesos.

Linseed, the principal oil-producing grain, amounted to 9,655 tons, worth 289,646 pesos, for the first half of the year 1911. In 1912 there were exported 16,709 tons of linseed, worth 501,268 pesos. In 1912 the export of wheat amounted to 16,185 tons, worth 372,247 pesos.

The principal flour (wheat flour) amounted, in the first half of 1911, to 5,057 tons, worth 182,045 pesos. In 1912 the export of wheat flour was 28,812 tons, worth 857,227 pesos.

The principal articles under vegetables for the first half of the year 1911 were: Garlic, worth 21,877 pesos; and onions, 13,565 pesos. The export of these products for the year 1912 were: Garlic, 23,922 pesos; onions, 17,531 pesos.

The principal fruit export in 1912 was oranges, worth 28,255 pesos.

The principal articles of export for the first half of the year 1911 under hay and fodder were: Linseed cake, 134 tons, worth 3,352 pesos; and alfalfa, 53 tons, worth 1,389 pesos. In the year 1912 the export of these products was: Linseed cake, 429 tons, worth 10,724 pesos; alfalfa, 527 tons, worth 13,700 pesos; bran, 18,262 tons, worth 160,366 pesos.



ARGENTINE REPUBLIC

According to *El Diario* the distance from RIO DE JANEIRO TO BUENOS AIRES BY RAIL is 2,700 kilometers (1,677.68 miles). The trip can now be made, under the present schedules in force in Brazil, Uruguay, and the Argentine Republic, in 108 hours, 12 of which are consumed in making connections. With close connections, which could easily be arranged in as much as the Uruguayan and Argentine sections of the route are under one management, the trip from Rio de Janeiro to Buenos Aires could be made in 96 hours. At the present time the journey by sections is from Rio de Janeiro to Sao Paulo, thence to Uruguayana, and from the latter place to Paso de los Libres where transfer is made to the through train from Asuncion to Buenos Aires, thence over the Northeastern Argentine Railway to Zarate, and from the latter place over the Buenos Aires Railway to Frederico Lacroze station in the city of Buenos Aires.— A fund of 3,000,000 pesos, currency (\$1,273,404), known as the ARMSTRONG FOUNDATION has been provided by Dr. Carlos Dose and sister, Luisa Dose de Larraviere, for the purpose of founding the Santo Tomas de Aquino school, an institution whose object is to educate gratuitously 400 Argentine children. Grounds have been acquired in the vicinity of Buenos Aires and the necessary buildings are in process of construction.—The eight practical AGRICULTURAL SCHOOLS of the Argentine Republic had 239 pupils in 1912 and 305 in 1913, or an average of 38 pupils per school during the latter year.—A NEW BANK, styled Banco Agricola Ganadero, has been formed in Concordia, Entre Rios, to serve the needs of local farmers.—The representative of the National Ministry of Agriculture in the Province of Corrientes reports that in his recent journey through the districts of Curuzu Cuatia and Mercedes, he has been making propaganda for alfalfa cultivation and the growing of bitter oranges. He has also procured and distributed consignments of Texas COTTON SEED and North American forage and corn seeds in various districts in order to encourage experiments by agricultural cooperative societies.—The FRIGORIFICO ARGENTINO which has been leased by Sulzberger & Sons will be known in future as "Frigorifico Argentino Central," subject to Government approval of the statutes of the new company, which is already buying cattle and sheep and killing at its full capacity.

The Government has approved the project prepared by the Irrigation Department for construction of a RESERVOIR at Los Sauces, La Rioja. The estimated cost is \$1,571,000.

The tender of the Sociedad Anonima Holandesa de Obras Publicas has been accepted for the dredging of the dock, anteport, and channel of PUERTO MILITAR. The price is \$1,500,000.

The representatives of a German syndicate have been in La Plata during the week and stated that it is their intention to obtain a site for the erection of CEMENT WORKS. The raw material will be obtained in the country.

A forecast of the growth of the PUBLIC LIGHTING SYSTEM of the municipality of Buenos Aires shows that in 1915, including in the estimate contracts already made, the city will have a lighting service in 4,059 squares with 8,061 arc lamps; in 760 squares with 2,660 electric clusters; in 5,555 squares with gas supplying 20,000 street lamps; in 1,564 squares with alcohol supplied to 2,346 street lamps; and in 1,752 squares with petroleum supplied to 5,502 street lamps, making a total of 13,510 squares lighted by the city. The cost of maintenance of the public lighting system of the municipality of Buenos Aires in 1916 is estimated at 4,600,000 pesos, currency (\$1,952,553).—The SHEEP FAIR and exposition of the Argentine Rural Society was held at Palermo in Buenos Aires from the 5th to the 9th of February, 1914. The exhibits were divided into four classes, and prizes were awarded each class. The sale of stock exhibited commenced on February 8.—The President of the Republic has authorized a company called "Sociedad Argentina de Termas de la Frontera" to exploit MINERAL WATERS. The capital of the company is 200,000 pesos, gold. (Gold peso equals \$0.9647 U. S.).



In order to carry out the provisions of the laws of 1909, 1911, and 1912 concerning the construction of a RAILWAY from Quiaca to Tarija, the National Congress has authorized the President of Bolivia to negotiate a loan of £1,000,000 (\$5,000,000), the proceeds to be used by the Government in constructing the railway referred to either administratively or through contracts with private parties. The loan is guaranteed from the net profits obtained in operating the line and from the revenues of the customhouses at Tarija and Yacuiba. The construction and operation of this railway will open up to development and exploitation a large territory of rich mineral and agricultural lands. When completed the road will form an important link in the chain of railways from Buenos Aires to La Paz, and connections at La Paz with the railway systems of Northern Chile and

Southern Peru. The loan has been placed in Europe at a discount of 10 per cent.—The Elidoro Villazon National AGRONOMIC AND VETERINARY INSTITUTE at Cochabamba is equipped with experimental grounds, laboratories, library, machinery, and apparatus necessary for imparting by the most up-to-date methods instruction in agronomic and veterinary science. The course covers a practical and theoretical study period of four years, under able professors, a number of whom are specialists contracted abroad. Applications for admission to the school for the current year will be received up to the end of February. The commencement of the school year is March 1. A number of scholarships worth 40 bolivianos (\$16) per month are available to students who need financial assistance while studying at the Institute. The acting director of the school is Pedro Charuli.—The Antofagasta Railway Co. has requested permission of the Bolivian and Chilean Governments to make the gauge of their line one meter.—A law has been passed requiring written contracts to be made in renting HOUSES or apartments where the monthly rent is not less than 25 bolivianos (\$10). The contract must be written on a special sealed paper furnished at the expense of the owner or agent of the house, and the duration of the contract must be stated.—The branch RAILWAY of 8½ kilometers, which runs from the main line of the Arica-La Paz road to Corocoro, a rich mining center, was built by the Government of Bolivia at a cost of £35,000 (\$175,000) or for about £20,000 (\$100,000) less than the estimates of the English contractors who bid on the work. The road was inaugurated during the latter part of 1913 and was constructed entirely under the direction of employees of the Bolivian Government. The maximum grade is 1.92 per cent, and the minimum radius of curves 100 meters. Steel sleepers were used and steel rails weighing 29 kilos per meter were laid. Construction work was in charge of the Bolivian engineer, Carlos Tejada Sorazano.—Dr. J. Grossi, a distinguished South American traveler and writer, reports that an herb called chipichopa, which grows on the tablelands of Bolivia, is an excellent remedy against MOUNTAIN SICKNESS OR "PUMA."—The Congress of Bolivia has authorized the President of the Republic to negotiate a loan of £1,000,000 (\$5,000,000) for use in supplying the City of La Paz with an abundant supply of POTABLE WATER and for the erection of a filtering plant.—EXPORTS from the port of New York to Bolivia in November, 1913, consisted of 5,414 pieces of merchandise valued at \$113,379, and consisted principally of hardware, machinery, petroleum, cotton goods, and foodstuffs. Most of these imports entered Bolivia via Mollendo, Peru, and Antofagasta, Chile. Merchandise to the value of \$11,480.97 was admitted free of duty.



BRAZIL

The IMPORTS of Brazil from January to October, 1913, amounted to £56,481,251 (\$282,406,255), and the exports to £50,781,599 (\$253,907,995), or a total foreign commerce during the period referred to of £107,262,850 (\$536,314,250). During the same period of 1912 the imports amounted to £51,786,236 (\$258,931,180), and the exports to £58,802,158 (\$294,010,790).—The Brazilian and Bolivian TELEGRAPH systems, with terminal points at Corumba and Puerto Suarez, have been connected. The telegraph line from Matto Grosso to Amazonas, at the close of 1913 lacked about 200 kilometers of being completed. The telegraph employees of Brazil have erected a mausoleum in Rio de Janeiro in honor of Baron de Capanema, the founder of the telegraph service of the Republic. The Director of Telegraphs of Brazil has sent albums prepared by two North American telegraphers, containing data concerning the telegraph systems of the world, to the directors of telegraphs in Paraguay, Uruguay, and Argentina. This album is also to be sent to the directors of telegraphs of other countries.—Press reports show that the work of fixing the BOUNDARY LINE between Brazil and Uruguay is rapidly progressing, and will probably be completed by the end of May of the present year.—The President of the Republic has inaugurated the ELECTRO-TECHNICAL INSTITUTE founded at Itajuba by Dr. Wenceslao Braz.—The MUNICIPAL THEATER in Rio de Janeiro has been leased for three years to Walter & Mocchi, former lessees, who have become popular in the Federal Capital on account of their presenting first-class plays.—The Senate has approved an appropriation of 650 contos (\$211,250) given as a SUBVENTION to the Coastwise Navigation Co. An appropriation of 1,650 contos (\$536,250) has been made for the reconstruction of the MARINE ARSENAL.—According to press reports Congress has approved a law recommended by the President of the Republic increasing the BRAZILIAN ARMY to 25,800 men.—The Government of Brazil recently sent 77,000 francs (\$15,400) to the chief of the Brazilian Naval Commission in London to be used in the purchase of military AEROPLANES for the army. In December last a shipment of 8 monoplanes, 3 biplanes, and 3 hydroplanes for the Brazilian military aviation school were received at Rio de Janeiro.—The Brazilian Senate has approved an appropriation of 500 contos (\$162,500) for the purchase of the LIBRARY and objects of art belonging to the late Baron do Rio Branco.—The official newspaper has published a decree approving new rules

and regulations relating to the coastwise navigation of the Brazilian MERCHANT MARINE.—The house of deputies has approved a special agreement between Brazil and Uruguay concerning FRONTIER RAILWAY communication.—Representatives of Portuguese boards of trade in Brazil met in Rio de Janeiro in December last to consider, among other things, the establishment of a LINE OF STEAMERS between Portugal and Brazil and the opening of a free port at Lisbon.—A delegation of Brazilian newspaper representatives recently visited Uruguay and the Argentine Republic, and on returning to Brazil brought with them a large number of newspaper men from Uruguay and Argentina.—A decree has been issued authorizing the South American Cable Co. to operate in the Republic.—A concession has been granted to Francisco Pinto Brandão authorizing him or the company he may organize to generate ELECTRIC POWER from the waters of the San Francisco River, not including the Anjiquinho water falls.



American capitalists interested in the Chuquicamata COPPER MINING zone of northern Chile propose to produce for export 40,000 tons annually of fine copper. Extensive preparations have also been made in the Potrerillos mining zone for the production of a large annual output of bar copper.—Great activity is noted in IRON MINING in Chile. The Bethlehem Steel Co., which operates in the Tofo iron mining district, proposes to export to the United States a million tons annually of ore assaying 68 per cent iron. The mine, which is near Coquimbo and about 4 miles from the coast, is said to have 60,000,000 tons of iron ore in sight, and enough reserve ores to supply the steel works for more than half a century. A Germany company has acquired the Algarrobo iron deposit at Vallenar. The property is valued at about \$2,000,000 gold, and is estimated to be capable of yielding a million and a half tons of ore annually.—The work of laying in the port of Valparaiso the large cement blocks weighing about 60 tons each, for the purpose of forming a BREAKWATER to protect that port, was begun at Punta Duprat in December last, and is now being actively pushed forward by the English construction company engaged in building the sea wall, which will take about three years to complete. To handle these blocks it is necessary to use large cranes, and the construction work seems to be of such a massive nature as to be able to resist the most violent storms.—Upon the recommendation of the Department of

Railways of the Government of Chile a bill has been introduced into the Chilean Congress authorizing the negotiation of a loan of £5,000,000, the proceeds of which are to be used in the betterment of the RAILWAY SERVICE of the Republic.—The following item occurs in a recent report of United States Consul Alfred A. Winslow, Valparaiso:

The Chilean American Permanent Exposition Co. has been organized at Santiago, Chile, with a capital of \$20,000 United States gold, to establish a permanent exposition of American products at Santiago. The Chilean Government has put at its disposal, free of charge, the spacious exposition building erected for the Chilean Centennial Exposition of 1910, which the company proposes to rent to American interests at so much per square foot per annum, including care, explanation, demonstration, and operation of articles and machinery left on exhibition. It would seem that this move is in line with the conditions on this coast, and that it would be well for American interests to study this opportunity of getting their products before the Chilean people, who seem desirous of becoming better acquainted with American machinery, manufactured articles, and products.

The President of the Republic has recommended that the National Congress enact a law establishing a BUREAU OF COMMERCIAL INFORMATION under the supervision of the department of foreign relations of the Government of Chile. The objects of this bureau are to study (1) The development of the foreign commerce of the country and especially domestic products suitable for export; (2) the making of commercial treaties and conventions; (3) commercial problems relating to international traffic; (4) to make investigations abroad concerning industries and commerce in general; (5) to circulate commercial propaganda abroad; (6) to make a study of laws and customs tariffs, and make known foreign laws and tariffs; (7) to study matters relating to commercial congresses; (8) matters relating to expositions of a commercial or industrial nature; and (9) to publish consular reports and other data collected by consuls.—A recent message of President Barros Luco recommends that the Chilean ARMY and Navy for 1914 consist of not more than 24,670 men. Of this number 7,232 are to belong to the regular army, 6,232 to the regular navy, 7,880 to the army reserve, 550 to the navy reserve, 1,022 to the coast artillery, and 1,754 to the rifle corps. According to this recommendation the navy for 1914 will have 6 men of war, 7 destroyers, 2 submarine boats, 5 torpedo boats, 7 training ships, 8 transports, and 10 cruisers.—There are six MILITARY WIRELESS telegraph stations in Chile which operate solely for the army and navy. New stations are now being constructed at Punta Arenas and Juan Fernandez, and the former station will soon be ready for service. Wireless stations have been planned at Puerto Montt and at different lighthouses along the coast.



COLOMBIA

At the beginning of the new year the President of Colombia, Dr. Carlos E. Restrepo, made an important address to his countrymen, extracts from which are, in substance, as follows: For the last time in my position as President of Colombia, I come to invite you to join in giving fervent thanks to God for the blessings He has bestowed upon us during the past year and to beseech Him to grant us the many things we may need during the year which begins to-day. * * * Peace has come, increasing thereby private and social interests, and the men of industry—each day more numerous and desirable—form a most noble army that will know how to preserve and defend it. The rudest attacks have been vanquished by an almost unanimous decision sustaining the honesty of the Government, and persons engaged in the industries and the people have known how to appreciate the efforts of an administration which guards the national revenues as it would its own and which has had the good fortune to harmonize ideas in the opinion of the public as to the integrity of the Government. The revenues of the State are increasing day by day without the necessity of new levies upon the wealth of Colombians, and with prudent management these resources alone will suffice to consolidate the bases of our economic and fiscal prosperity. Thanks to them and to their honest disbursement our domestic and foreign treasury obligations have been paid to the last farthing—that is to say, a punctual payment of our debts in general and a strict compliance with all our duties as a sovereign republic have been observed.

—Law 114, promulgated in 1913, provides that teachers in the primary schools who have served not less than twenty years, have the right to a life PENSION at a salary equal to half that which they have been receiving during their last two years of service.—An executive decree provides that MORTGAGE banks or the mortgage sections of banks shall not issue mortgage bonds of a value of less than \$100 gold. Banks which have issued such bonds of smaller denominations are required to call them in within three months under penalty of forfeiting their concession in accordance with law 24 of 1908.—Dr. Jose A. Llorente has been appointed SECRETARY OF THE TREASURY to take the place of Francisco Restrepo Plata, who goes to London as the fiscal agent of the Government.—Law 119 of 1913 authorizes the President to construct administratively the Nemocon to Magdalena RAILWAY via Chiquinquirá, Pamplona, Tunja, Santa Rosa, Soatá, and Cucuta. An initial appropriation of \$250,000 has been made for this purpose.—The Executive will send abroad for

instruction 8 young army officers, 4 police officers, and 4 young men from the engineering school. He has been authorized to contract 4 INSTRUCTORS of tropical agriculture, one of wireless telegraphy, two veterinarians, two customs experts, one postal expert, and 2 statisticians.—In December last the first BASEBALL game in the Republic was played in Bogota, and great enthusiasm was manifested by persons devoted to that sport.—The Government has granted a concession to Joaquin de Mier to construct and exploit for 50 years a RAILWAY from some convenient point in the district of Riohacha or on the Goagira coast to the district of Barrancas in the Province of Padilla. Plans are to be submitted to the Government within eight months and work is to be begun within two years thereafter. The gauge of the railway is to be 1 meter, the maximum grades 2 per cent, and the minimum radius of curves 100 meters on the main line and 60 meters on branch lines. The concessionaire is authorized to construct a wharf 12 meters wide and of the necessary length at the maritime port he may select, together with warehouses, shops, etc. The Government gives 80 kilometers of public lands for each kilometer of railway built. At the expiration of 50 years the road and all its appurtenances become the property of the State.



The electors qualified to vote in Costa Rica in 1913 numbered 20 per cent of the population. At a general election held on December 7, 1913, 78 per cent of the qualified voters exercised the right of suffrage. At this election there were four candidates for President of the Republic. These candidates received, respectively, 42, 30, 27, and 1 per cent of the vote. As none of the candidates for President secured an absolute majority of the votes cast no election resulted. The Constitution of Costa Rica specifies that one of the duties of Congress is "to examine the certificates of election and count the votes for President of the Republic and declare elected the one having an absolute majority of votes. In case there is no such majority the election shall be made from the two candidates who obtained the greatest number of votes; but if there are two or more having the same number and another one having a greater number than these Congress shall select the President of the Republic from among all the candidates." The two candidates who received the highest number of votes in the popular election referred to were Dr. Carlos Duran and Licentiate Maximo Fernandez. The Congress of Costa Rica meets in regular session on May 1 of each year and

remains in session 60 days, which period may be extended to 90 days if necessary. One of the duties of the Congress which meets in May, 1914, will be to choose a President who will take possession of his office on May 8 for a period of four years.—The municipality of Puntarenas has received bids for the enlargement of the MUNICIPAL BATHS of that city and the fitting up of a reading room, dance hall, and playgrounds to be used in conjunction with the bathing beach.—A contract has been made with Eusebio Ortiz Brenes for the establishment and maintenance of a COASTWISE SERVICE between El Coco, a port in the Province of Guanacaste, and Golfo Dulce. At least one voyage a month is to be made between Puntarenas and Porto Viejo, and two trips a month between Puntarenas and Golfo Dulce, with stops at Uvita and Boca Zacate. The vessels to be used for this service are to have a capacity of from 75 to 100 tons of freight, 15 first-class and 20 second-class passengers, and an average speed of 15 miles an hour. The time between Puntarenas and El Coco is 14 hours and that between Puntarenas and Golfo Dulce 18 hours.—A new contract has been made by the Government with Manuel Barahona & Co. for a continuation of the PASSENGER AND FREIGHT SERVICE from Puntarenas to Puerto Jesus, Chomes, Manzanillo, San Pablo, Ballena, Humo, Bebedero, and San Lucas. This company, which operates under the name of "Empresa de Transportes Marítimas del Golfo de Nicoya," has, at the present time, eight vessels in use and renders an excellent freight and passenger service between the points mentioned.—Licentiate Alfonso Jimenez has been elected president of the governing board of the COLLEGE OF LAWYERS at San Jose for 1914, and Lic. Arturo Saenz, secretary.—The REVENUES of the Government of Costa Rica for the first 11 months of 1913 aggregated 8,654,141 colones (\$4,024,175).—The department of public works has received bids for the construction of 27 SCHOOL BUILDINGS in different parts of the Republic. Work on these buildings is to be commenced immediately.—The Government is negotiating with foreign capitalists for the opening of a NEW PORT on the Atlantic Coast and for the construction of a railway from that point to Sarapaqui. The mouths of the Tortuguero and Colorado Rivers are mentioned as probable locations of the port.—Alberto and Manuel Murillo Rodriguez have been granted a concession to use the waters of "Quebrada de la Cañeria" in developing ELECTRIC LIGHT AND POWER for municipal and industrial purposes. A similar concession has been granted to Roberto Jimenez to furnish the municipality of Desamparados with light and power. Alberto Rudin has obtained a concession to use the waters from the Quebrada Grande stream for developing electric light and power for use in the towns of Orotina and San Mateo.



CUBA

A new branch of the SPANISH BANK of the Island of Cuba has been opened in Habana at 124 Prado Street. The Spanish Bank has now 40 branches in the Island, 6 of which are in Habana and the remainder in the interior of the Republic. This bank caters to the agricultural interests of the country, and especially to the sugar interests, and is an important factor in enabling sugar planters to obtain money on their crops without being forced to sell in advance at unsatisfactory market prices. At the present time many sugar planters secure funds from the banks in order to enable them to cultivate their crops and operate their mills during the grinding season. In such cases the products of the mills are mortgaged to the banks as a guarantee, and these mortgages are sold in the open market usually at prices below the London price of sugar. In this way the Cuban sugar planters who mortgage their crops are handicapped in obtaining the highest market prices for their products. Legislation has been recommended to the Cuban Congress, the object of which is to place transactions between banks and borrowers who hypothecate their crops on such a basis as will enable borrowers to receive at all times the highest market prices for their products.—The department of agriculture of the Government of Cuba has ruled that clerks, waiters, and other employees included under the law prohibiting persons employed in CONTINUOUS INDUSTRIES from working over 10 hours a day, can not remain on duty over that period without violating the law, even if they wish to do so.—A NEW LINE OF STEAMERS has been planned to run between Key West and Habana. At present the time between the two ports is 7 or 8 hours. The new line not only proposes to reduce the freight and passenger rates, but also to greatly lessen the length of time consumed in making the voyage. The board of trade at Tampa, in cooperation with a number of Cuban shippers, has taken steps to secure a new line of vessels to ply between that port and Habana, and propose to make Boca Grande one of the principal ports of call.—The Cuban Government has been invited, through the Government of the United States, to appoint a delegate to be a member of the RACING BOARD for the international regattas to be held in connection with the Panama-Pacific International Exposition at San Francisco in 1915.—The Congress of Cuba has enacted a law making the honorary CONSULATES at Boston, Jacksonville, Kingston, Seville, Valencia, San Sebastian, Toronto, Calcutta, Ponce, and Colon consulates of the second class. Consulates of the second class have also

been established at San Francisco, Cal., and Hull, England, and the consulates at Madrid and Santander, Spain, at Philadelphia, United States, and Genoa, Italy, have been made consulates of the first class.

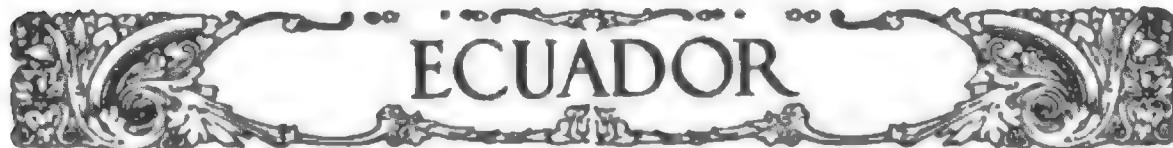
—The denouncements of PETROLEUM, gas, and asphalt deposits, with La Tropical near Habana as a center, has extended far into the interior, and prospecting continues unabated throughout a large part of the Province of Habana.—Lieut. Commander Juan Rivera and Lieut. Jose Van der Cutch, Cuban naval officers, have been permitted by the Government of the United States to take a two year's TRAINING COURSE on board a United States vessel in active service and have been detailed to the "Wyoming."—The department of agriculture has bought 100 acres of land near Camagüey for use in establishing the Camagüey FARM SCHOOL.—Twenty head of Charlois CATTLE, valued at about \$10,000, have been imported from France for breeding purposes on the Sancti Espiritus Ranch.—The Carlos III Avenue TUNNEL in Habana, which was inaugurated early in January last, has greatly facilitated tramway traffic in the metropolis.—Dr. Pablo Desvernine y Galdos, former Minister of Cuba to the United States, has been appointed SECRETARY OF STATE of the Government of Cuba.—Casa Grande, a new HOTEL opened at Santiago by the Cuban Railway, will give special attention to the tourist trade. The building is four stories high, has 86 rooms, and is well equipped.



DOMINICAN REPUBLIC

Paul P. Lyon and Sterling Gena, civil engineers occupied in the study and survey of the route of the Monte Cristy to Cibao RAILWAY, report that work has been commenced on the section which runs from Manzanillo to Copey, and that about 3 kilometers of the line are constructed and ready for operation. The route of this road runs through a large region of partially undeveloped territory exceedingly rich in agricultural and mineral wealth, and especially adapted to stock raising, sugar-cane growing, and tobacco cultivation. Construction work is actively being pushed forward on this line, and its completion will mark an epoch that will count for much in the material development of the immense latent resources of that part of the Dominican Republic.—The survey of the WAGON ROAD from San Pedro de Macoris to Hato Mayor has been completed, and the work of construction has again been commenced. The route of this wagon road penetrates a region capable of producing the principal cultivated crops of the Tropics, and the soil in the neighborhood of

Hato Mayor and over a wide adjoining area is exceedingly fertile. The territory this wagon road traverses produces annually about 15,000 kilos of cacao, all of which is shipped out of the country through the port of Macoris. Considerable quantities of coffee, maize, rice, and onions are also raised in this section of the Republic, and the honey, wax, and hides exported from this region are of excellent quality. It is estimated that the territory tributary to the wagon road mentioned consumes about 100,000 quintals of merchandise and provisions annually. A conservative estimate of the entire annual commerce of the region referred to is \$300,000 gold. It is in this region that the great Consuelo sugar plantation is situated, and some of the best breeds of cattle, mules, and horses in the Republic come from that part of the country. This wagon road was first planned about 12 years ago, and work was commenced on it at that time, but the road was never completed.—Alluvion GOLD DEPOSITS, and copper and iron mines have been denounced in the mineral zone drained by the Dos Rios, Maniel, and Bani Rivers, in the Province of Santo Domingo, on lands belonging to Joaquin Montero, and in the Descubierta, Manclar, Centella, and Caraballo Hills. The persons interested in the development and exploitation of these mines are Federico Cos, Juan Gallart, and Joaquin Montero.—The Board of Trade of the city of Santo Domingo has requested the Department of Commerce of the Dominican Government to continue during 1914 the reduction of 25 per cent granted in August last in the freight tariff of the Central Railway on TOBACCO for the purpose of stimulating the cultivation of this plant in the region of Cibao, and a request is also made that the department use its good offices in securing lower ocean freight rates to Europe (Hamburg). The board also recommends that the parcels-post treaty made between the Dominican Republic and Germany in May, 1913, be ratified and put in force.—A report of the Treasury Department for 1912 shows that the production of SUGAR in the Dominican Republic during that year was 88,775,297 kilos, as compared with 85,630,469 kilos in 1911. From 1905 to 1912 the exports of sugar increased 47 per cent.



The following excerpt from a recent report of United States Consul General Frederic W. Goding, Guayaquil, is an evidence that Ecuador is getting ready for the Panama Canal:

Owing to the belief that abuses are practiced on the public by the foreign steamship companies operating in the ports of Ecuador, the Executive has been empowered by the National Congress to promote the organization of a NATIONAL STEAMSHIP

COMPANY with headquarters at Guayaquil, for traffic between Ecuadorian and foreign ports to such extent as may be desirable for the commerce of the nation. The capital is to be 1,000,000 sures (\$481,928), which may be increased to 4,000,000 sures (\$1,927,711), the issue to consist of shares of 100 sures and of 10 sures (\$48.19 and \$4.82) each. When 500,000 sures (\$240,964) of the capital shall have been subscribed, the company is to organize. Of this capital one-tenth part will be subscribed by the Government.

A service will be established to Panama (or some other northern port) by which commerce may be carried on between Ecuador and the Atlantic route; also another to the south as far as may be required. There will be a coasting service to Panama, or some other foreign port, and intermediate ports; foreign vessels will not be permitted to enter the coasting trade of Ecuador. Provision is made that passenger and freight rates shall not be greater than those fixed by competing lines.

The WIRELESS telegraph system of Ecuador comprises a temporary station installed at the captaincy of the port of Guayaquil. This is used to communicate with the station at Punta Arenas to the south of Puna Island, and with steamers which pass in the neighborhood of the island of Santa Clara. As soon as the station on Santa Ana Hill is completed, a long distance wireless service will be established with Guayaquil, covering a distance of from 500 to 1,200 miles.—The Government of Ecuador, according to statements of the press, proposes to take over and operate the constructed section of the Bahia de Caraquez to Quito RAILWAY from Bahia to Chone until such time as a contractor satisfactory to the Government can be found to take charge of the road and extend the construction to Quito. The work done on this line, which has a 0.75-meter gauge and the route of which covers a distance of 400 kilometers, has been accomplished under the management of a French company. Railway experts have recommended that the gauge of the line be changed to not less than one meter, and that the route be run in a straight line, in so far as the topography of the country will permit, to Quito in order to shorten the distance and decrease the cost of construction.—According to "El Dia," a newspaper of Quito, the President of the Republic and the Minister of Public Works have offered to begin the construction of the ESMERALDA TO QUITO RAILWAY during the present year. The building of this road through the four northern Provinces of Ecuador is of the utmost importance in opening up and developing a large area of rich agricultural and mineral lands in the interior of the country hitherto rendered practicably inaccessible because of the lack of adequate transportation facilities.—The Government of Ecuador has decided to operate the Payana SALT MINES either administratively or by contract, and has fixed the prices at the rate of 40 centavos (20 cents) per 100 kilos of salt as it comes from the mines, 80 centavos (40 cents) per 100 kilos of refined salt, and 5 centavos (2½ cents) per kilo of refined, pulverized salt specially prepared in packages for the retail trade.—The Congress of Ecuador has authorized the Executive to contract

for the extension of the Manta WHARF 200 feet, and for the construction of the Manta to Santa Ana Railway to or beyond Pajan.—The Federal Congress has enacted a law authorizing the establishment of RIFLE CLUBS and proving grounds in different parts of the country.—The Congress of Ecuador has authorized the Chief Executive to contract with Mauricio Blaise to supply the city of Bahia de Caraquez with POTABLE WATER.—A new HOSPITAL is to be built in the city of Loja. The city of Esmeraldas is also to be provided with a hospital.—The building used as a SCHOOL OF FINE ARTS in the city of Quito is to be sold, and the proceeds used toward the construction of a new building specially arranged for this purpose.—The President of the Republic has been authorized by Congress to arrange for the SEWERING and paving of the city of Quito and for providing the capital with a supply of potable water.—A recent law provides for the construction of a RAILWAY from Babahoyo to Ventana via Puebloviejo.—The municipality of Ibarra is to construct a building for the SCHOOL OF ARTS AND CRAFTS of that city.—The municipality of Mejia has been authorized to expend 20,000 sures (\$10,000) for potable water and ELECTRIC lighting plant.



GUATEMALA

By authority and under instructions of President Estrada Cabrera, the Secretary of Fomento of the Government of Guatemala contracted with the Esperanza Iris VIENNA OPERA CO. for 20 performances in the Colon theater in the city of Guatemala, commencing about the middle of January, 1914. The company has an orchestra composed of 28 pieces. In addition to the 20 performances referred to the company agreed to give two plays for the benefit of some public institution to be indicated by the representative of the Government. At each matinee the company gave 50 gallery tickets to children in the public schools and 10 orchestra seats to teachers in the public schools. The Government agreed to pay the expenses of the members of the company, including the transportation of baggage, etc., from Vienna to Guatemala City and return, to place Colon theater at the disposal of the troupe, and to pay the Opera Co. \$12,000 United States gold for its services.—The official newspaper of Guatemala charges the following prices for OFFICIAL ADVERTISEMENTS or announcements: Title by prescription or perfecting title, 10 pesos (\$4.35); notice of auction, 10 pesos (\$4.35); denouncement of public lands, per lot, 25 pesos (\$10.87), and for denouncements of mines,

registration of trade-marks, petitions for concessions, 50 pesos (\$21.75) each.—A recent executive order makes the issue of STAMPED PAPER for the years 1912-1913 good during 1914 and 1915, provided it has stamped on the margin: "Validated for the years 1914-1915 according to executive order of November 25, 1915."—The department of telegraphs and telephones has contracted with Guillermo S. Flores to supply the material, consisting of iron bars, crosses, nuts, etc., necessary to construct a TELEGRAPH LINE between Retalhuleu and Coatepeque, for a consideration of 2,228.50 pesos (\$969.40).—The President of Guatemala, through the Consul of Cuba in the city of Guatemala, has requested the services of the following CUBAN TEACHERS: A teacher for the normal schools, a teacher for general instruction in the public schools, and a teacher of agriculture. The Government of Cuba has taken steps to supply the teachers referred to.—In December last the WATER MAINS of the Pueblo Nueva Vinas, containing an abundant supply of potable water, were extended to the plaza of that town.—At Cuilapa, in the department of Santa Rosa, two public SCHOOL BUILDINGS for use as mixed schools, were completed and opened for use during the latter part of last year.—Work has been begun on the new TELEGRAPH LINE from Moyuta to Cuilapa.—Work is rapidly progressing on the building for the SCHOOL OF NATIONAL INDUSTRIES at Jalapa. This building is being erected in accordance with an executive decree.—In December last the STEAMSHIP SERVICE of the United Fruit Co. between Puerto Limon and Puerto Barrios was temporarily suspended. It is the intention of the company to reopen the service in a short time with improved passenger and freight facilities. Until this is done traffic will be handled by the Hamburg American Line which has a semimonthly service between Limon and Colon.—The Government of Guatemala has established a CUSTOMSHOUSE on the Suchiate River on the Mexican frontier where the railroad crosses the border.



A special session of Congress was called to convene on Monday, January 26.—On February 8 Gen. Orestes Zamor, former governor of the department of the north and minister of war in 1911, was elected PRESIDENT OF HAITI by a vote of 93 out of 105 ballots cast. President Zamor succeeds President Michel Oreste, elected President on May 4, 1913, and who resigned on January 27. The cabinet of the new President is constituted as follows: Minister of

foreign affairs, J. N. Léger; minister of finance, Edmund Léspinasse; minister of public works, Gen. Beaufossé Laroche; minister of the interior, Gen. Carlos Zamor; minister of public instruction, M. Dalencour; minister of war and marine, Gen. Etienne.—The Government of Haiti has accepted the invitation of the United States to take part in the INTERNATIONAL PANAMA-PACIFIC EXPOSITION, which is to be held in San Francisco in 1915. The rules governing the participation have just been published for the benefit of those who will exhibit, and much enthusiasm and interest is being shown to make this a memorable event in the history of the country. Among the products to be exhibited are to be mentioned the principal commercial export products of the country—coffee, cacao, cotton and other textiles, honey, campeachy wood, gaiac, cedar, mahogany, oak, and other Haitian woods and fruits, and furniture made from Haitian woods; products of national industry—rum, tafia, liquors, crystallized fruits, tobacco, shoes, saddles, women's handiwork; also, mineral and other products of the earth. In the Haitian building there will be a coffee room, where Haitian coffee will be served to visitors, and a bar where rum and other Haitian drinks will be served at cost price. The exhibit will also consist of educational, scientific, literary, artistic, and statistical sections, and newspaper articles and other means for advertising the country from all points of view. All articles which are to be exhibited at the exposition are to be sent to the Chamber of Commerce of Port-au-Prince to be passed upon by a committee, and will be exhibited to the Haitian public before being shipped to San Francisco. After the closing of the exposition the articles will either be sold in San Francisco or reshipped to Haiti to be sold at auction.—The NORMAL SCHOOL FOR GIRLS opened its classes the middle of January. The director of the school is Mlle. Maradon, an accomplished French woman who was engaged by the Haitian legation in Paris. Two other teachers from Paris are connected with the school and others will be engaged as needed. Great inducements are offered by the department of public instruction to encourage young girls of the country to take this course. The State allows 30 gourdes a month to each scholar during the entire course of study, and after graduation this amount is allowed them whether they are teaching or not.—The work of RESTORING ST. JOSEPH'S CHURCH is rapidly nearing completion. The pulpit, which is of oak, beautifully carved, has been received and will soon be put in place.—The Cuban Government has appointed Señor Lacenzi Pedro y Miyaya CHANCELLOR OF THE LEGATION at Port-au-Prince. He succeeds Señor Pereira, who has been transferred to Rio de Janeiro.—On December 29 His Excellency Stephen Leech, the new MINISTER FROM GREAT BRITAIN, was officially received by the President and the usual felicitous speeches were

exchanged.—A force of workmen is busily engaged in widening and repairing AVENUE LAMARTINIÈRE in Port-au-Prince, formerly called Avenue Bois Verna, which has become too narrow for the increased traffic.—The FREIGHT RATES on the Northern Railroad have been greatly reduced and in consequence shipping over this line shows a considerable increase. The rates are very little higher now than freight charges by coastwise steamers.—Mr. St. Germain Champagne has been appointed CUSTOMS INSPECTOR at Port-au-Prince to succeed Mr. César Ducasse, who died recently.



HONDURAS

On the assembling of the Congress of Honduras in regular session on January 1, 1914, President F. Bertrand read an interesting MESSAGE in which he reviewed the acts of the administration during the previous year. Referring to the opening of new public highways and the improvement of old ones, the Executive states that the disbursements for this purpose in 1913 were 209,586.43 pesos. (The silver peso is equal to \$0.435 U. S.) The road tax plus the balance carried over from the previous year amounted to 344,628.81 pesos, so there was a surplus in the treasury at the beginning of 1914 for use on public highways. The President recommends that the mining code be amended so as to encourage mining operations and to secure the largest measure of justice and protection to all persons engaged in the exploitation of mines. The Executive states that the economic condition of the country has greatly improved, and that all obligations of the Government are promptly met as they fall due. The net revenues of the Government during the year 1912-13, were 5,207,232.10 pesos, as compared with 4,627,905.25 in 1911-12, or an increase in 1912-13 of 579,326.85 pesos.—A recent shipment of 3,000 SPONGES to Mobile, Ala., collected off the coast of Honduras, is said to have consisted of sponges which excel in quality, softness, and appearance the best specimens secured from the Mediterranean fisheries. Up to the present time the gathering of sponges in Honduras has been an unknown industry. If the reports of Greek divers who are now in Honduras, who have engaged in sponge exploitation in the Mediterranean Sea, are correct, there is an abundance of merchantable sponges to be found in Honduran waters, and sponge fishing is capable of being developed into a great and profitable industry.—The TREATY OF PEACE concluded in Washington on November 3, 1913, between the representatives of the Governments of Honduras and the United States, was approved by the President of Honduras

on December 16 last.—New CONSULATES of the Republic of Honduras have been established at Newport News, Louisville, and Boston.—The adreferendum TREATY OF ARBITRATION concluded in the city of Guatemala on December 26, 1913, between the representatives of the Governments of Honduras and Italy, was approved by the President of Honduras on December 26, 1913.—The mayor of Tegucigalpa has contracted with the agency of a sewing machine company in that city to place MACHINES in the Girls' School of the Federal Capital, and give a three months' course of instruction in sewing and in the manipulation of the machines.—The HONDURAS PAVILION in the Panama-Pacific Exposition at San Francisco will have a portico with 6 Doric columns, will be two stories, have a frontage of 100 feet, and a depth of 24 feet.—The Government of Honduras has authorized the AGRICULTURAL AND COMMERCIAL BANK to establish such branches in the Republic as it may deem advisable.—The Sixth Central American Conference met in the hall of the Central University in Tegucigalpa on January 1, 1914. The Congress was called to order by Dr. Mariano Vasquez, the minister of foreign relations of Honduras, who delivered the address of welcome. Dr. Vasquez' address was answered by Dr. Carlos Lara, the delegate from Costa Rica. The delegates of the different countries were Dr. Carlos Lara, Costa Rica; Dr. Victor Sanches Ocana, Guatemala; Dr. Pedro Jose Bustillo, Honduras; Dr. Emilio Alvaraz, Nicaragua; and Dr. Manuel I. Morales, Salvador. According to press dispatches the most important point of the program was a proposal from Nicaragua that the conference insist that those Governments which had not yet done so approve the agreement for free commerce between the Central American governments reached at a former conference. The delegates were requested to suggest to their respective governments the advantage of sending annually on a tour of instruction to the cities of the United States two students from each Republic who shall have excelled in arts and crafts, the trip to start in April and to last four months. Uniformity of weights and measures were also recommended.



Construction work has been commenced on the MULE TRAM-WAY between Copula station and the town of Ixmiquilpan, State of Hidalgo.—The Tizimin annual FAIR, held at Tizimin, in the State of Yucatan, early in the beginning of each year, was largely attended in 1914. The exhibits of agricultural products and stock

were very interesting and attracted a great deal of attention. During the closing days of the fair the sale of live stock was one of the principal features of the exhibition.—Steps have been taken toward founding a NAVAL SCHOOL at Mazatlan on the Pacific Coast. The only other naval school in the Republic is located at Vera Cruz. The new school is to be thoroughly equipped and made a practical and up-to-date institution.—The German Government has commissioned Dr. Leopoldo Max. Wagner, a noted philologist, to collect the FOLK SONGS, fables, and stories of the Mexican people, and to study the variations of the Castilian language in Mexico since the time of the Spanish conquest. He is now in the Republic making investigations along the line of his work, and expects to complete same in about eight months. Dr. Wagner also represents the Hispanic Society of New York.—Fishing for SHELLS AND PEARLS in the waters of the Gulf of Lower California and in the Pacific Ocean off the coast of western and northwestern Mexico is a very promising industry. Artificial cultivation is resorted to in the waters about the island of Espiritu Santo and other islands in the vicinity. More than one million pesos (\$500,000) have been spent in fostering and developing this industry. Concessions have been granted, some of which run for a long term of years, to encourage the growing of shells artificially.—An agricultural and stock FAIR was held in Leon, State of Guanajuato, from the 19th to the 25th of January last. The horticultural exhibits were very fine, and especially the displays of strawberries. The exhibits of fine stock, particularly milch cows, was notable. Medals and diplomas were awarded to the successful exhibitors.—The City of Mexico has been invited to participate in the Geographic and Historic Congress (Congreso Hispano de Geografia e Historia) to be held in Seville, Spain, on April 11, and has appointed a delegate.—Preliminary steps have been taken looking to the exploitation of the agricultural, forestal, mineral, and maritime wealth of the MARIA ISLANDS. Generally speaking, the soil of these islands is suitable to the growth of a large variety of horticultural products, and an abundance of precious woods are said to be found in the interior of the islands. The valleys and plains are well adapted to stock raising, and while the mineral resources have never been thoroughly explored, precious metals are known to exist in the hills of the interior, and rumors are current that rich gold and copper ores abound in considerable quantities. The maritime products of the islands are excellent fish, fine shells, and corals. Concessions for the exploitation of the islands have been made at different times, and some of the concessionaires are now preparing to exploit their products under the direction of the department of fomento.—COAL and petroleum have been discovered at Pochutla, State of Oaxaca, in the neighborhood of

Puerto Angel. The value of the deposits has not yet been fully determined.—The department of fomento has received the following applications recently for WATER RIGHT concessions: Maria Guadalupe R. de Garcia, for the waters of the San Jeronimo River, State of Jalisco, for motive power; Jose Mendez Padillo, for waters of the same river for motive power; and G. H. Burlingham, for the waters of the Arroyo de San Vicente, in the northern part of Lower California, for irrigation.



NICARAGUA

The American of Bluefields contains the MESSAGE which the President of the Republic delivered to the National Congress at its first joint session in December last, in which he states that the Government is a purely civil and democratic government, animated with the firm intention of returning to the people their sacred privileges of liberty as far as compatible with the preservation of order and the carrying out of works vital to the future. Care has been taken with regard to exterior peace and domestic tranquillity and in maintaining the best relations with Central America and with all the nations of the world. Negotiations with the United States are pending for a convention on terms advantageous to Nicaragua, giving the option of constructing a canal through the Republic, and making use of the advantages offered by the great lakes and the San Juan River. Every effort of diplomacy has been used in favor of the convention, which means continuous peace, prosperous and civilizing developments, and a guaranty of the sovereign rights of the country by a strong and friendly nation. The million dollar loan negotiated with New York bankers has been devoted to the work of monetary conversion, augmenting the capital of the National Bank, the payment of back salaries, and \$100,000 to cover judgments of the mixed commission. A million dollars was realized by the sale of shares of the Pacific Railroad Co., the Government reserving 49 per cent of the stock, and a concession was granted to the company for constructing in five years a railroad from San Juan del Sur on the Pacific to San Jorge on Lake Nicaragua. The paving of the streets of Managua has been started.—The United Fruit Co. has inaugurated a ten-day Caribbean COASTWISE SERVICE. First-class fare from Bluefields to Cape Gracias is \$7; to Truxillo, \$16; to Ceiba, \$17.50; to Tela, \$18, and to Puerto Cortez, \$20. The rate for deck passage to Cape Gracias or Port Limon is \$4, and to all other points \$8. Deck fares less than \$7 do not include meals.—Sr. Adolfo Vivas, Consul

of Nicaragua at San Francisco, has kindly furnished the MONTHLY BULLETIN with statistics showing that the EXPORTS FROM SAN FRANCISCO to Nicaragua in 1913 aggregated 146,456 packages of merchandise weighing 9,571,914 kilos, valued at \$461,985. These shipments in detail were as follows: Groceries, \$53,940; rice, \$56,684; flour, \$147,144; machinery, \$18,076; petroleum, \$55,933; wines \$11,212; cement, \$5,447; and sundry goods, \$113,549.—The House of Deputies has elected the following officers: Mariano A. Zelaya, speaker; Emilio Lacayo, vice speaker; Toribio Tijerino, jr., first secretary; Ramon Henriquez, second secretary; Salvador Muñoz, first vice secretary, and Agustin Bolaños Chamorro, second vice secretary. The officers of the Senate are: Pedro Gonzalez, speaker; Alcibiades Fuentes, vice speaker; Santiago Arguello, secretary; Sebastian Uriza, second secretary; Tiburcio Veneiro, first vice secretary, and Leopoldo Salazar, second vice secretary.—The INTERNATIONAL CLUB of Bluefields has been organized with the following officers: William A. Deverall, president; A. C. Lawder, vice president; S. H. Baker, treasurer, and Ray H. Miller, secretary.—Luis Olsen has denounced a GOLD MINE at Coco Creek, jurisdiction of Wawa. The denouncement covers 5 acres. The mine has been christened "Maria Christina."—*The American*, of Bluefields, states that the matter of acquiring LANDS along the Rio Grande by holders of the Deitrick bonds has been settled in a manner satisfactory to those who have selected lands and commenced planting.—Pope Pius X has divided Nicaragua into dioceses and appointed Archbishops with headquarters in Managua and Leon, and Bishops with residence in Granada and Matagalpa.



In 1913 the total number of BUILDINGS of all kinds erected in the city of Panama was 297. Of these 249 were constructed of lumber, and the remainder of stone, concrete, brick, and iron. The constructions in the borough of Santa Ana numbered 152, those in the borough of Caledonia 136, and 9 in the borough of San Felipe. The total area occupied by these buildings was 61,492 square meters.—An executive decree of December 30, 1913, provides that LETTER POSTAGE within the Republic of Panama to the Canal Zone or to the United States of North America shall be, on and after January 15, 1914, charged for at the rate of 2 cents for each 20 grams or fraction thereof.—The Diario of Panama City has arranged through a competitive coupon vote, which closes on April 15, 1914, to send two

of its subscribers, at the expense of the paper, on a pleasure and STUDY TRIP of a month's duration to New York in order that they may obtain a personal knowledge of the United States and of that metropolis.—The mayor of the city of Panama has recommended to the municipal council of the Federal capital the construction of a PARK opposite the Hotel Tivoli, using the grounds popularly known as "Delesseps Park." These grounds are well adapted to the making of a park, but are not used for such purposes at the present time. The mayor also recommends the construction of Las Bovedas drive, the erection of a kiosk suitable for use in giving open-air concerts, and other public projects which would tend to beautify and embellish the city.—An executive decree of December 31, 1913, extends the time for the REGISTRATION of Chinese, Syrians, and Turks until February 28, 1914, in the Province of Panama, and in the other Provinces of the Republic until January 31 of the same year.—The municipal council of the city of Panama has passed a resolution requiring the CONSENT OF THE MAYOR of the city to the construction, alteration, and repair of buildings before work is commenced on the same.—The town of Nueva Gorgona, situated on the Pacific coast about 40 miles from the city of Panama, was inaugurated at the beginning of the present year by President Belisario Porras, assisted by members of his cabinet. This town was built by former residents of the Canal Zone.—R. W. Hebard, an American engineer and former employee of the Canal Zone, has obtained the contract to erect the building of the Panama Government at the Panama Pacific Exposition at San Francisco.—The President of Panama has signed a decree regulating the REGISTRY OFFICE of the Republic in accordance with law 13 of 1913. Under the new law the registration officers, located at the capitals of the seven Provinces of the Republic and whose duties were to register land titles, mortgages, births and deaths, etc., are dispensed with, and the entire work is centralized in the registration office of the Federal capital. Article 137 of the decree provides that foreign companies having agencies or branches in Panama will have a year in which to be inscribed in the mercantile register. Article 84 requires the following registrations in the mercantile register: Documents affecting companies; powers of attorney, revocations, and substitutions; appointments by companies of agents or managers, and revocations of such; antenuptial contracts; acknowledgment of debt or obligation by merchants in favor of third parties; decrees of divorce or separation of property of married persons; decrees in bankruptcy proceedings; authority conferred by a husband upon wife to carry on a separate business; and licenses of auctioneers and business brokers. The following fees are charged for registering documents: For rights in real property not over \$50, \$0.50; from \$50 to \$250, \$1; from \$250 to

\$1,000, \$2.50; from \$1,000 to \$20,000, \$2 for the first \$1,000 and \$1 for each additional \$1,000. When more than \$20,000 is involved, the charge is the same as specified for from \$1,000 to \$20,000 and 50 cents for each additional thousand in excess of \$20,000. For mortgage notes and all notes of reference, 50 cents; for cancellation of inscriptions or notations, \$2; for certified copy of an entry, \$1 for first page and \$0.25 for each additional page; for certificates relating to any entry, without copying verbatim, \$1; for certificates that an entry does not exist, \$1; and for all entries in the register of civil status, vital statistics, or entries without an expressed value, \$3.



The BUDGET of the Government of Paraguay for 1914, as recommended in a recent message of President Eduardo Schaeerer, shows estimated receipts amounting to 3,859,500 gold pesos and 28,185,400 paper pesos. The estimated expenditures aggregate 1,639,733.52 gold pesos and 61,449,592 paper pesos. These receipts and expenditures are made up of the following items: Receipts—Customs revenues, 3,525,300 gold pesos; internal taxes, 20,093,400 paper pesos; and sundry revenues, 334,200 gold pesos and 8,092,000 paper pesos. The detailed expenditures are: Congress, 1,875,600 paper pesos; department of interior, 53,140 gold pesos and 16,378,520 paper pesos; foreign relations, 200,913.19 gold pesos and 1,766,400 paper pesos; treasury, 3,000 gold pesos and 8,585,380 paper pesos; justice, worship, and public instruction, 59,188 gold pesos and 12,687,640 paper pesos; war and marine, 159,159 gold pesos and 20,156,052 paper pesos; and the public debt, 1,164,333.33 gold pesos.—A recent issue of "El Diario," of Asuncion, contains the full text of the by-laws of the Asuncion TRAMWAY, LIGHT & POWER CO. (Ltd.), incorporated in London on December 28, 1912, and recorded in Asuncion on January 23, 1913. The object of the company is to do a tramway and electric business in Paraguay, with headquarters at the Federal capital. The company may also do business in other South American countries should it deem advisable. The capital of the company is £600,000, divided into 600,000 shares of £1 each. This capital may be increased if the shareholders so desire.—AUTOMOBILING is becoming a popular means of communication in Paraguay wherever the public highways are in a suitable condition for this purpose. Recently the President of the Republic made an automobile trip from San Bernandino to Asuncion in one day. The road selected was from San Bernandino to Altos, thence to Patiño, and through

Itagua, Capiata, and San Lorenzo to Asuncion. Considerable time was lost in making the trip because of the ovations given President Schaefer along the route. In a continuous journey without stops a considerable saving in time could be effected.—Dr. Moise S. Bertoni, an experienced agronomist and botanist of Asuncion, has been appointed chief of the Bureau of AGRICULTURE of the Government of Paraguay. Dr. Bertoni has an international reputation because of his writings on agricultural subjects and the great work he has done in Paraguay in connection with the agricultural school at Asuncion.—Dr. E. Ryffel, a Swiss scientist and industrialist who spent a number of years in Asia Minor and in Egypt, states that the COTTON of Paraguay is equal to the best quality of cotton produced in the United States and Egypt. It has been estimated that in 1863 there were about 60,000,000 plants of cotton under cultivation in Paraguay, but for a number of years thereafter there was a considerable decrease.—Experiments made by Dr. Bertoni show that more than 1,000 kilos of cotton can be harvested from a hectare of land in Paraguay, or about 1,000 pounds to the acre. Of late years there has been a revival of interest in its cultivation in Paraguay, and it is confidently predicted that before many years it will be one of the staple products of the country.—In May, 1914, the Republic of Paraguay will celebrate the hundredth anniversary of its independence. One of the most interesting features of this celebration will be an international STOCK FAIR at Asuncion, the preparation and direction of which are to be in charge of the Agricultural Bank at Asuncion. Stock growers from Argentina and the neighboring countries have been invited to participate in this fair. Commerce in stock, and especially cattle, between Paraguay and the Argentine Republic has grown very much during the past few years and the trend is toward a still larger growth. A conservative estimate of the number of cattle in Paraguay at the present time is 6,000,000 head.



PERU

An executive decree of December 29, 1913, adopts for 1914 the BUDGET submitted to the National Congress by the President of the Republic on August 28, 1913. The revenues are estimated at £3,547,836 and the expenditures at £3,109,836, leaving an estimated surplus of £438,000. This budget became operative on January 1, 1914, for the calendar year 1914.—A bar of GOLD BULLION, weighing 1 quintal and with an intrinsic value of £7,000, was recently

brought from the Cotabambas Auraria mine for exhibition in Lima. Gold mining in certain sections of Peru at the present time is very promising and considerable development work is being done in a businesslike and systematic manner. Late reports concerning the mining zone in the neighborhood of Cotabambas would indicate that a revival of gold mining has recently taken place in that vicinity.—The Society of Agricultural Engineers at Lima has taken preliminary steps for the holding of a NATIONAL SUGAR CONGRESS in Lima during the first half of June of the present year. Sugar-cane planters, agricultural experts, and persons interested in the sugar industry in Peru in any of its branches are to be invited to participate in the proceedings of the Congress. The Congress will be divided into four sections: (1) Cultivation; (2) refining of sugar; (3) pathology; and (4) miscellaneous subjects. Persons desiring to take part in the Congress are requested to write the organizing committee in Lima or the departmental delegates, giving name and address, and if they desire to submit papers for the consideration of the Congress the title of same should be given.—A registration fee of £1 will be collected from members. At the closing session of the Congress a date will be fixed for the holding of the Second Sugar Congress of Peru. The congress will be in session seven days, which time may be extended for a longer period if desired.—The officers of the HISTORIC INSTITUTE at Cuzco are: Dr. Luis E. Valcarcel, president; Dr. José Lucas Caparó Muñoz, vice president; Dr. J. Uriel Garcia, secretary; and Dr. Cosme Pacheco, treasurer. The institute is officially recognized by the Government of Peru, and its principal work is the study of the national and archeological history of the country.—A monoplane for the AVIATION SCHOOL at Bellavista near Callao has been received from England. This machine was invented and constructed by the Peruvian aviator and artisan, Romulo Burga, the funds for carrying on the work having been supplied by the Peruvian Government. Prof. Teofilo Durand, an aviator of more than local reputation, is in charge of the aviation school.—The total number of passengers carried by the principal RAILWAYS AND TRAMWAYS of Peru during the first nine months of 1913, was 11,164,315, as compared with 10,214,592 in 1912. The total number of tons of freight hauled during the same period was 1,804,271 in 1913 and 1,385,328 in 1912.—The Congress of Peru has passed a law authorizing the free importation, through the port of Mollendo, for a period of two years from September 20, 1913, of CORRUGATED-IRON ROOFING and other construction material imported for use in the Province of Condesuyos and other places whose buildings were damaged by earthquake on August 6, 1913.

SALVADOR

The exchange of ratifications of the ARBITRATION CONVENTION, signed in the city of San Salvador on September 3, 1909, between the representatives of the Republics of Brazil and Salvador, took place in Washington on November 12, 1913.—It is expected that SILVER COIN amounting to more than 2,000,000 colones, minted abroad for the banks of the Republic, will have been received in Salvador before the beginning of March of the present year. The Bank of Salvador recently ordered 800,000 colones coined in the United States in denominations of 1 colon, 25, 10, and 5 hundredths of a colon. The banks are bringing these coins into the Republic in compliance with the provisions of a decree of November 7, 1913, and for the purpose of relieving not only the scarcity of fractional coin experienced in Salvador during the latter part of the past year, but also with the object of encouraging and facilitating the dispatch of small commercial transactions.—Since January 1 of the present year TRAINS have been running four times a week between Usulutan and Punta Cutuco, a distance of about 100 kilometers, in the western part of the Republic. The principal stations along the line are Batres, Calle Nueva, San Miguel, Miraflores, El Carmen, Olomega, Portillo, La Cumbre, and La Union. A telegraph service is maintained between the stations of Usulutan, Batres, San Miguel, Miraflores, Portillo and La Union.—According to the "Diario del Salvador" President Melendez and members of his cabinet have decided to carry out plans for the erection of WORKMEN'S HOUSES in the City of San Salvador. Dr. Quiñones, the Secretary of Fomento, has taken an active part in getting up plans and estimates in connection with this undertaking and in formulating a bill which will be introduced into the next regular session of Congress asking for a grant of a block of land in a suitable place in the federal capital upon which to begin the building of workmen's houses. If the Government adopts the proposed plans, modern and sanitary houses will be constructed and rented or sold to workmen on very favorable terms.—According to the bureau of statistics of the Republic of Salvador exports of black BALSAM during the last 10 years to the United States and Europe aggregated 1,259,990 pounds, valued at \$2,086,557 silver. Of these exports, Germany received 58.1 per cent; the United States, 29.2; France, 9.4; Great Britain, 1.6, and all other countries 1.7. France charges an import duty of 10 francs per 100 kilos, and Italy 9 liras per 100 kilos. None of the other countries to which shipments were made charge import duties.

export duties charged on balsam by the Republic of Salvador are 20 pesos per 100 kilos gross weight, plus the value of the "Poliza" and revenue stamps.—A recent executive decree permits the free importation into Salvador of SOLE LEATHER from the Central American countries.—The Salvador AUTO CLUB has been organized in the city of San Salvador. One of the objects of the club is to carry on a propaganda in favor of good public roads suitable for automobile traffic. Owing to the efforts of the club and the support it is receiving from the local authorities, considerable activity is noted in the improvement of roads in the country.—During the first three months of 1913 the EXPORTS from San Francisco to Salvador amounted to \$258,260.82.—An institute for the treatment of HYDROPHOBIA has been established in Rosales Hospital in the City of San Salvador.—P. V. Carias has been authorized by the municipality of La Union to establish an ELECTRIC lighting plant in that city. The municipality agrees to pay 300 pesos monthly for 100 incandescent lights of 500 candlepower each. The contract is for a period of 15 years.



URUGUAY

Dr. Carlos M. de Pena, minister of Uruguay in Washington, has kindly furnished the Monthly Bulletin with information received by him from the secretary of the treasury of the Republic of Uruguay, showing that the ECONOMIC AND FINANCIAL CONDITION of that country at the close of 1913 was very satisfactory and auguring most favorable results for 1914. Interest and amortization of the public debt, both domestic and foreign, as well as the expenses estimated in the general budget have been paid. A conservative forecast shows that there will be a credit balance of \$520,000 at the close of the fiscal year which will terminate on June 30, 1914. The profits of the Bank of the Republic, which is a State institution with a paid-up capital of \$13,000,000, were \$1,720,000 in 1913. The gold reserve on hand in this bank on December 31 last was \$10,600,000, or about 10 per cent in excess of that required by law. The profits of the International Mortgage Bank in 1913 were \$429,000. The foreign commerce of Uruguay in 1913, in round numbers, was \$120,200,000, consisting of exports \$67,600,000, and imports, \$52,600,000, or an excess of exports over imports of \$15,000,000. The balance sheets of private banks throughout the Republic for 1913 show profits. Commerce and industry have victoriously passed through the difficulties of the year during the temporary contraction

of the currency. There is an optimistic feeling throughout the Republic not only concerning the political stability of the Government but also as to the financial condition of the country.—The secretary of the treasury of the Government of Uruguay has sent to the budget committee of the House of Deputies the proposed amended BUDGET for 1914 showing estimated receipts of 31,-621,394.57 pesos, and estimated expenditures of 30,894,643.20 pesos, leaving an estimated surplus of 771,751.37 pesos.—The Government has signed a contract with Dr. Gabriel Terra as representative of the Uruguay Railway Co., which undertakes construction of THREE RAILROAD LINES as follows: (1) From Montevideo to Carmen in the Department of Durazno and thence to a point where junction will be made with the Midland Railway; length, 205 miles. (2) A line of a few miles to connect the East Coast of Uruguay Railway at Olmos with the above-mentioned line to Carmen. (3) A line from San Carlos to Rocha; length, 50 miles. The lines provided for in the contract, and which are expected to be operated by the Uruguay Railway Co., will give the Midland system an independent connection with Montevideo and establish a coast route from Montevideo by way of Olmos, Maldonado, San Carlos, and Rocha to Paloma, a new port for light-draft vessels near Cabo de Santa Maria.—According to the ad referendum contract made by the Government of Uruguay with the Ethelburga syndicate of London, which contract with slight modifications was approved by the Senate on December 22 last, the proceeds of £2,000,000 will be placed at the disposal of the Government, the money to become available in installments in the present year. According to clause 18 as soon as the contract is definitely formulated and duly signed, the Government shall sell and the syndicate shall buy the bonds, representing £2,000,000, at the price of £86.50 per £100 face value. The bonds will be accepted and paid for as follows: £500,000, 15 days after signing the contract; £500,000 on April 1, 1914; £500,000 on July 1, 1914; and £500,000 on or before October 1, 1914. Clause 20 states that the Government shall not authorize or issue any foreign loan, other than the present, before October 31, 1914. All differences arising out of the contract are to be submitted to arbitration.—Dr. Pauline Luissi, a distinguished physician of Montevideo, has been sent abroad by the Government of Uruguay to study the methods of teaching SEX HYGIENE in the normal schools of Europe, with a view of adapting same, if deemed proper, to similar schools in Uruguay.—A contract has been made by MacArthur Bros., of New York for the construction of a railway between Florida and Carpinteria. It is understood that the line will be extended to the frontier by the contractors referred to.—The President has

submitted a bill to Congress recommending the appropriation of \$50,000 to be used in draining more than 1,000 hectares of INUNDATED LANDS known as the "Banados de Carrasco" in the immediate vicinity of Montevideo. These lands, which front on the ocean, are slightly above sea level and are intended for use for parking purposes.—The Central & Eastern Uruguayan Railway has arranged with the Lambruschini Navigation Co. to transport passengers from Buenos Aires to Maldonado at reduced rates. Round-trip tickets, good for 30 days, will be sold from Buenos Aires to Maldonado for 13.50 pesos.—The museum at Montevideo has recently received collections of MINERALS, among which were black marbles from Minas and Melo; bituminous coal from Melo; marbles from Carape, Corrales, and Puntas de Pan de Azucar; hematite from Melo; copper from Pan de Azucar; galena from San Fructuoso; and slate from Puntas de Pan de Azucar.



VENEZUELA

The national sanitary bureau of the Republic of Venezuela has issued rules and regulations authorizing the proper authorities of maritime ports to require captains of vessels anchored at ports under their jurisdiction to affix on the chains of the anchors and on the cables or ropes used to fasten vessels to the shore, apparatus or devices that will prevent the passage of RATS. This rule applies from the time vessels arrive in port until the time of their departure. The devices used must be of designs approved by the national sanitary bureau. Connection between vessels and the wharf are prohibited, after 6 o'clock in the evening, and vessels must not approach nearer than 5 meters to the wharf. Should it be necessary for any cause to temporarily decrease this distance, connection with the land shall be discontinued immediately after the cause ceases, and the vessel shall withdraw to a distance not less than that required by the regulations. Failure to comply with these rules and regulations subjects those who violate them to a fine of 500 bolivars or to arrest.—Title to the Rosario COPPER MINE has been issued to Lisandro Hernandez and Francisco Antonio Zerpa. The denouncement covers an area of 200 hectares situated in the Zamora district, State of Aragua. The same parties have been given title to the Santa Ana copper mine situated on the Belmonte or Penas Negras lands in the district and State already mentioned.—That copper mining in Venezuela is a PAYING INDUSTRY may be seen from the following

extract of a report made recently by United States Consul H. R. Wright, at Puerto Cabello:

The South American Copper Syndicate, of Aroa, Venezuela, established a new record by declaring a total dividend of 350 per cent during the fiscal year 1912-13. A translation of a recent statement regarding the operations of this company follows:

"The South American Copper Syndicate, of Aroa, Venezuela, declared a total dividend of 350 per cent during the year 1912-13, against 250 per cent in 1911-12, 145 per cent in 1910-11, 30 per cent in 1909-10, and 25 per cent in 1908-9. The capital of this company consists of 150,000 shares of stock of 2s. (\$0.49) each, almost all of which have been issued.

"The output for the year ended April 30, 1913, gave a net profit of £33,500, which, added to a former favorable balance of £10,400, makes a total profit of £43,900 (\$213,640). When the dividend is paid as accorded, there will still be £2,100 (\$10,220) to be entered in the new account.

"It is virtually impossible to form an exact opinion regarding the life of this property-on account of the mineral formation, but according to the opinion of a well-known expert there is sufficient copper ore to continue with the same annual output for some years yet.

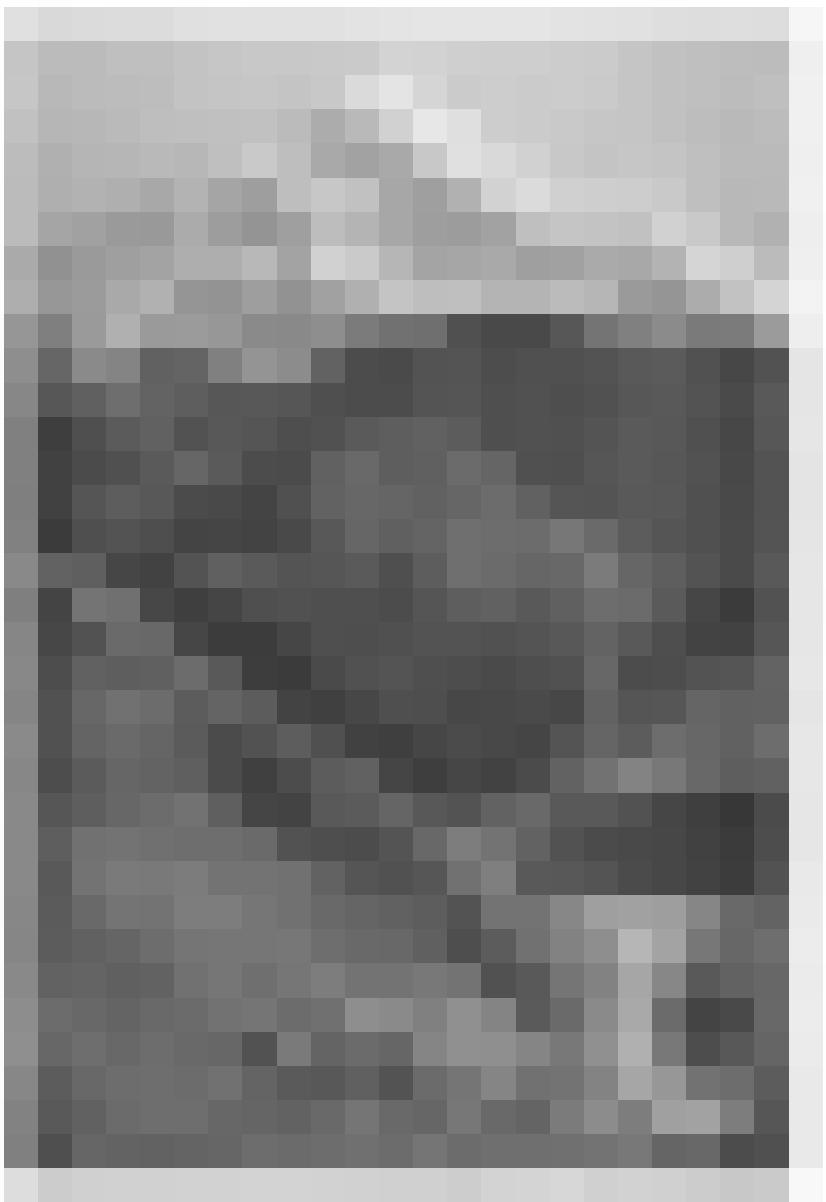
"The actual value of the stocks issued at 2s. (\$0.49) is 35s. (\$8.50) in England."

In 1913 there were 146 TRADE-MARKS registered in Venezuela. Of these 49 were to citizens of the United States, 30 to Venezuelans, 26 to Englishmen, 16 to Germans, 13 to Frenchmen, 5 to Spaniards, 3 to Swiss, 2 to Austrians, and 2 to Italians. During the same year 37 commercial labels were registered in the Republic, 30 of which were to Venezuelans. These trade-marks and labels covered arms and explosives, stationery, foods, beverages, drugs, medicines, hardware, agricultural tools, instruments, jewelry, typewriters, electric machines and apparatus, machinery, perfumes, paints, cigars and tobacco, wines, beers, and liquors.—The Great Tachira Railway Co. has been granted an extension of six months' time in which to fully complete the RAILWAY to Cara del Perro. The road is to be ready for the passage of trains to that point on or before April 15 next, and is to be delivered to the Government, together with all rolling stock and appurtenances, ready for public use on June 30, 1914.—L. Riera has petitioned the Government for permission to establish in Venezuela FACTORIES for manufacturing products derived from petroleum. The petitioner proposes to make an initial investment of 50,000 bolivars in the business. Jesus Fernandez requests permission to establish a woolen-cloth factory in the Federal capital with a minimum initial investment of 20,000 bolivars. Juan Santana has requested authority to establish a paper factory, and O. Snelling requests permission to engage in aerial cable transportation at La Guaira and Caracas. Arroyo and Nuñez have solicited permission to manufacture alcohol out of maize.—At the close of the first quarter of 1913 there were 12 RAILWAYS in the Republic of Venezuela with a total length of 800 kilometers (497 miles). The amount of capital invested in these railways at the time mentioned was 194,300,000 bolivars (\$38,860,000).





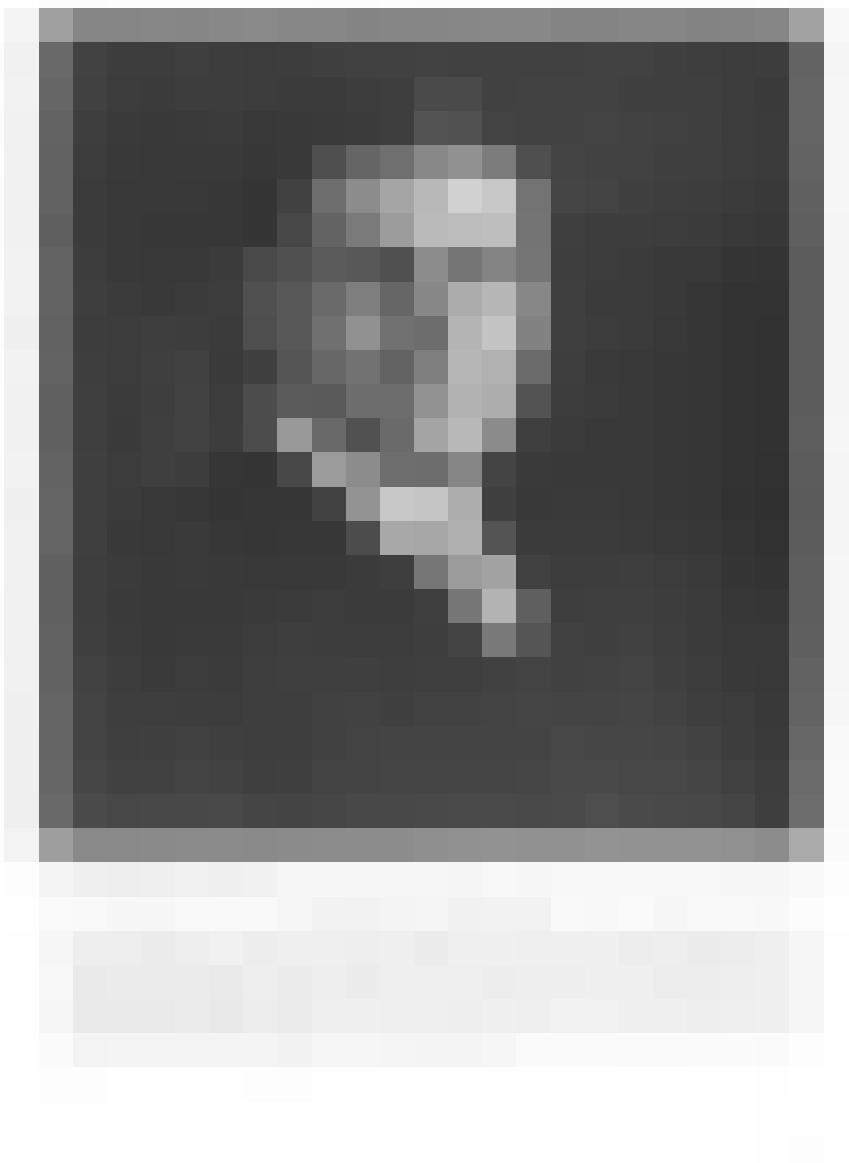




they are piled peak on peak, so that the passes through them extend for scores of miles from the rugged slopes of the Pacific on one side across an intervening plateau to the slopes toward the Atlantic on the other. In the center of the continent the western edge is still more abrupt, while the eastern face leads in a gentler declivity into the huge basins of the Amazon or the Rio de la Plata. In the southern third the Andes contract. The width across them is measureable in miles, and in most cases the passes are crevasses between the snow-clad summits towering above them. To cross the mountains here was more a question of endurance and courage than of time.

As a fact of history, the passage of the Andes has been an accomplishment in one of the most romantic periods of the world. Almost before Columbus's bones were cold a reckless Pizarro (Gonzalo) in 1540 effected the march through the mountains of Quito to the Napo River, but his friend, Orellana, turned traitor, fled down the Amazon, and thus reached the Atlantic, probably the first European to go overland from ocean to ocean. Through more southern passes the march went on. The Incas, it is said, escaped across Peru; their conquerors followed them and disappeared, leaving only rumors of a traveled but impracticable route behind them. From Bolivia (Alto Peru) a pass was with hardships and hazard forced eastward down the mountain into the plains of northern Argentina. Another pass, lower and more serviceable, has long been used from northern Chile, near Antofagasta, about where the Tropic of Capricorn cuts the continent, and this is becoming better known as plans for another railway between Chile and Argentina are projected. The awe-inspiring Uspallata Pass, through which San Martin's army crept, is the best known of all, and over this the mail and passenger traffic has long been sent, whenever possible thereby to avoid the tedious voyage through the Strait of Magellan. Farther yet to the south are other passes, less formidable, less elevated, and more approachable; but these are waiting till scientific surveys make them better known and more available. Every pass from Ecuador to Patagonia has its traditions, however, and has suffered the crossing of the continent by aborigines, explorers, conquerors, and the agents of later commercial progress.

The Uspallata remains, nevertheless, the famous pass across the Andes. Its elevation of 12,500 feet, and the peak of Aconcagua, 23,392 feet, towering above it makes it remarkable. Over it runs the old mule road between Argentina and Chile; on the division line is situated the beautiful statue of Christ of the Andes, which is visible to all who make this passage, and just below it is the newly constructed tunnel opened for the railway in 1910 at an elevation of 10,500 feet. Its advantage lies in its directness between the two

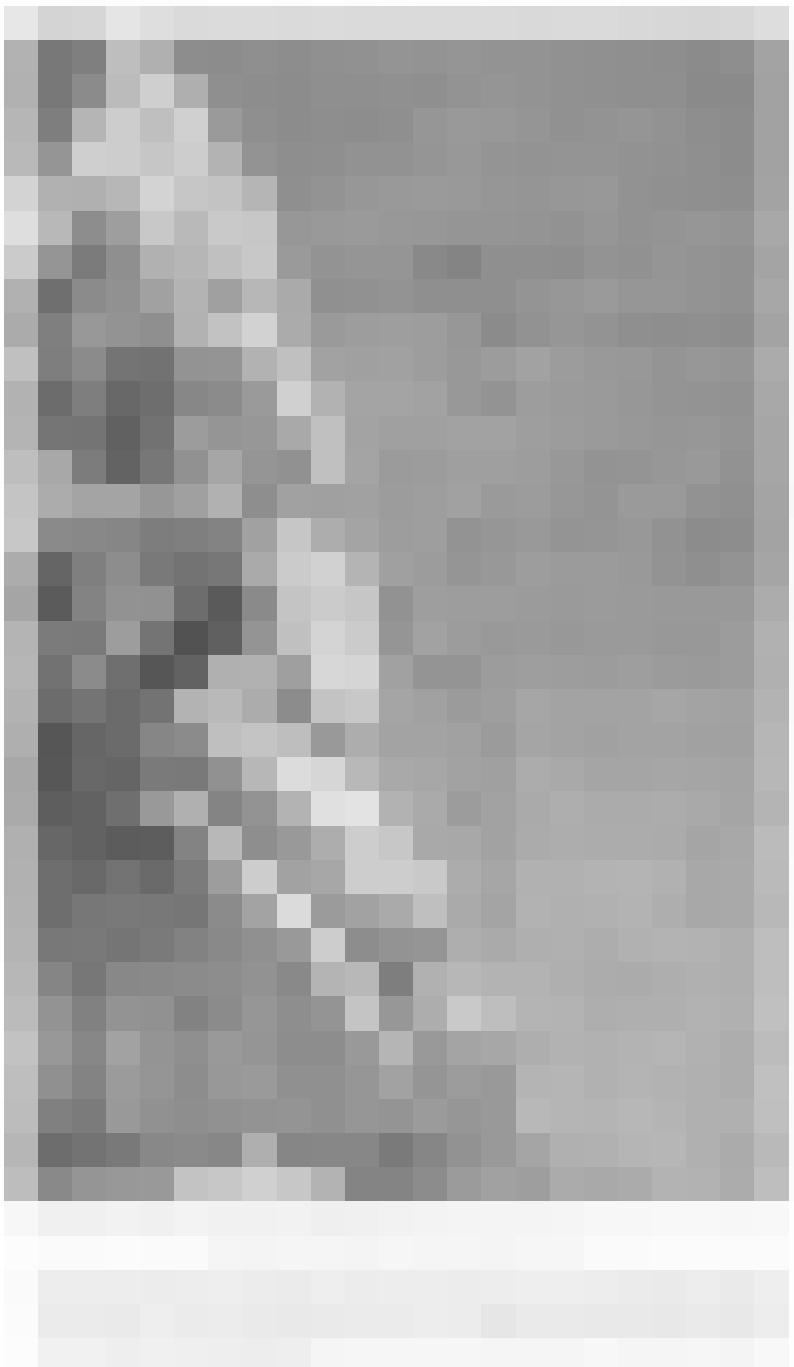


capitals and the seaports, Santiago and Valparaiso in Chile and Buenos Aires in Argentina. To cross the Uspallata is the ambition of all birdmen, because it is so difficult. To fly over the Andes at a lower altitude would not be very hazardous, but in that case the achievement would not be so noteworthy. To cross any other pass in an automobile might be equally as hard, but then the rivalry would not have the same zest, because conditions would not be equally as trying for both machines—that in the air and that on the ground. The Uspallata, therefore, has remained the only route that would satisfy those who desired a victory on equal terms.

It was at first thought that the aeroplane would have but little trouble in surmounting the pass. The success of the lamented Chaves in crossing the Alps gave great hope that the apparently similar flight through the Andes could be made as soon as the region had been carefully studied. In fact, three navigators attacked the venture almost at the same time. One, Clodomiro Figueroa, proposed to fly from the Chilean to the Argentine side, while the others, Jorge Newbery¹ and Teodoro Fels, had in mind the same passage, but from the Argentine to the Chilean side. Each planned the flight as between Los Andes in Chile and Mendoza in Argentina, a distance, following the railway, of 230 kilometers (143 miles). Normally it could be done in an easy three hours, but unexpected irregularities of the air in the cleft through the mountains made the flight dangerous, and in fact practically impossible with the facilities at hand.

Figueroa gave cautious study to the problem. He flew without difficulty from Santiago to Santa Rosa de Los Andes, where he landed, with the hope of continuing from there the actual passage. Three times he essayed it, and each time was driven back by high winds, by treacherous air pockets, or other such obstacles to continuous flight. The first attempt, December 16, 1913, he found that his machine was not powerful enough to beat its way against the forces of the winds that came through the pass. He had made many calculations on the strength of these winds, their direction, and the hour of greatest violence, and all indications were that early in the morning, about 4 o'clock, gave the best promise of success. The second attempt was made at this hour on December 18, the aviator ascending to an altitude of 2,250 meters (about 7,400 feet), but was again driven back by the strength of the wind. The third attempt was made on the 20th of December, this time a still higher altitude being reached, 3,200 meters (10,500 feet), but even at this height it was impossible to drive the machine forward, while air pockets threatened to end the trip disastrously. For the time being the flight was abandoned, Figueroa deciding that his machine was not powerful enough, and

¹ As this was going to press the sad news has just been received that Jorge Newbery was killed (March 1) while making an attempt to cross the Andes from the Argentine side.

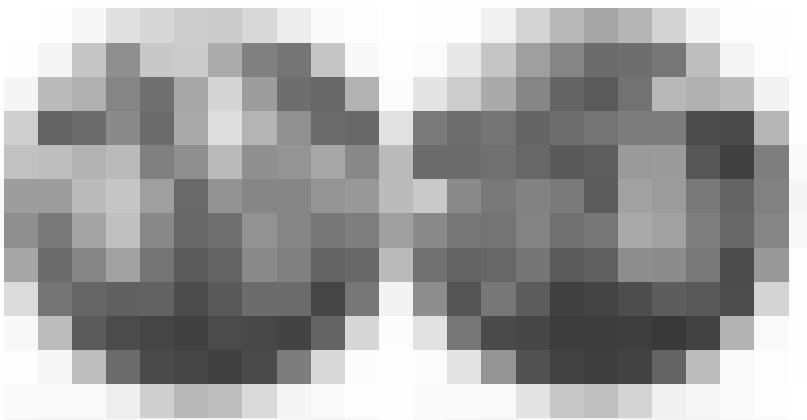


that a greater horsepower machine was necessary. Incidentally it should be noted that the people of Chile, made enthusiastic with the daring attempts of their aviator, immediately began a popular subscription to purchase for him an aeroplane of 160 horsepower, with which he may feel confident of attaining success.

Meanwhile from the Argentine side similar enthusiasm had been awakened. Jorge Newbery had already made a flight from Buenos Aires to Montevideo, in Uruguay, and in May, 1913, he ascended to the highest elevation in America and the fourth highest recorded, 4,400 meters (14,436 feet). This aviator has determined to reach success in crossing the Andes, and he attacked the problem in a different manner. He realized the difference between the Alps and the Andes, for the former required a flight of only 33 kilometers (20½ miles) and an elevation of 2,200 meters (7,218 feet); but the latter, over or through fiercely winded gorges, demanded a flight of at least 166 kilometers (103 miles) and of nothing lower than 4,000 meters (13,123 feet). Another aviator, Teodoro Fels, who effected the first passage of the Rio de la Plata in January, 1913, was keen on making the attempt, and he had selected Mendoza, on the Argentine side, for his venture. His purpose has been to assure himself that his machine would surely reach an altitude of 4,500 meters (14,764 feet), and then, with confidence thus established, to launch himself into the air for one bold attempt at successful crossing. The people of Argentina are eager, equally with those of Chile, in promoting the desires of their favorite aviator, and have promised a subscription of 100,000 pesos for the purchase of the best machine obtainable.

So much for the present status of the attempt to cross the Andes in a flying machine. That it will be finally accomplished can not be a matter of any doubt whatever, because all these feats are achieved in the long run, and what has been done in Europe over sea and land will just as surely be recorded in America before the science of flying is much older.

The passage by automobile has been a different problem. The old pass over the mountain between Mendoza and Los Andes, 249 kilometers (155 miles), has been in existence and used for many a year, but since the railway tunnel was opened (1910) it is not so popular for the traveler. The ascent on the Argentine side is more gradual than the descent on the Chile side. From Buenos Aires to Mendoza the distance is 1,048 kilometers (651 miles), and although easy enough it is not so continuously traveled but that for an automobile it gives variety sufficient to satisfy the tourist. As the actual summit is reached the road narrows to almost a mule path, twisting and turning around the side of the mountain in a way to daunt the most venturesome, even on mule back, but certainly demanding from the man at the wheel of an automobile every ounce





FIRST PAN AMERICAN DENTAL CONGRESS¹

TO a group of Brazilian dentists belongs the distinction of conceiving and organizing the First Pan American Dental Congress, the sessions of which took place in Rio de Janeiro, in October, 1913. A large number of delegates from various cities of Brazil and from several of the other countries comprised in the Pan American Union, contributed by their presence and active cooperation in making the congress as complete a success as its most sanguine promoters could have expected.

The value of such a reunion consists not merely in affording an opportunity for the discussion of the scientific problems included in its program, but also in the incalculable benefit derived from bringing the various members into close touch with one another and enabling the visitors from different countries to gauge the progress being made by their neighbors.

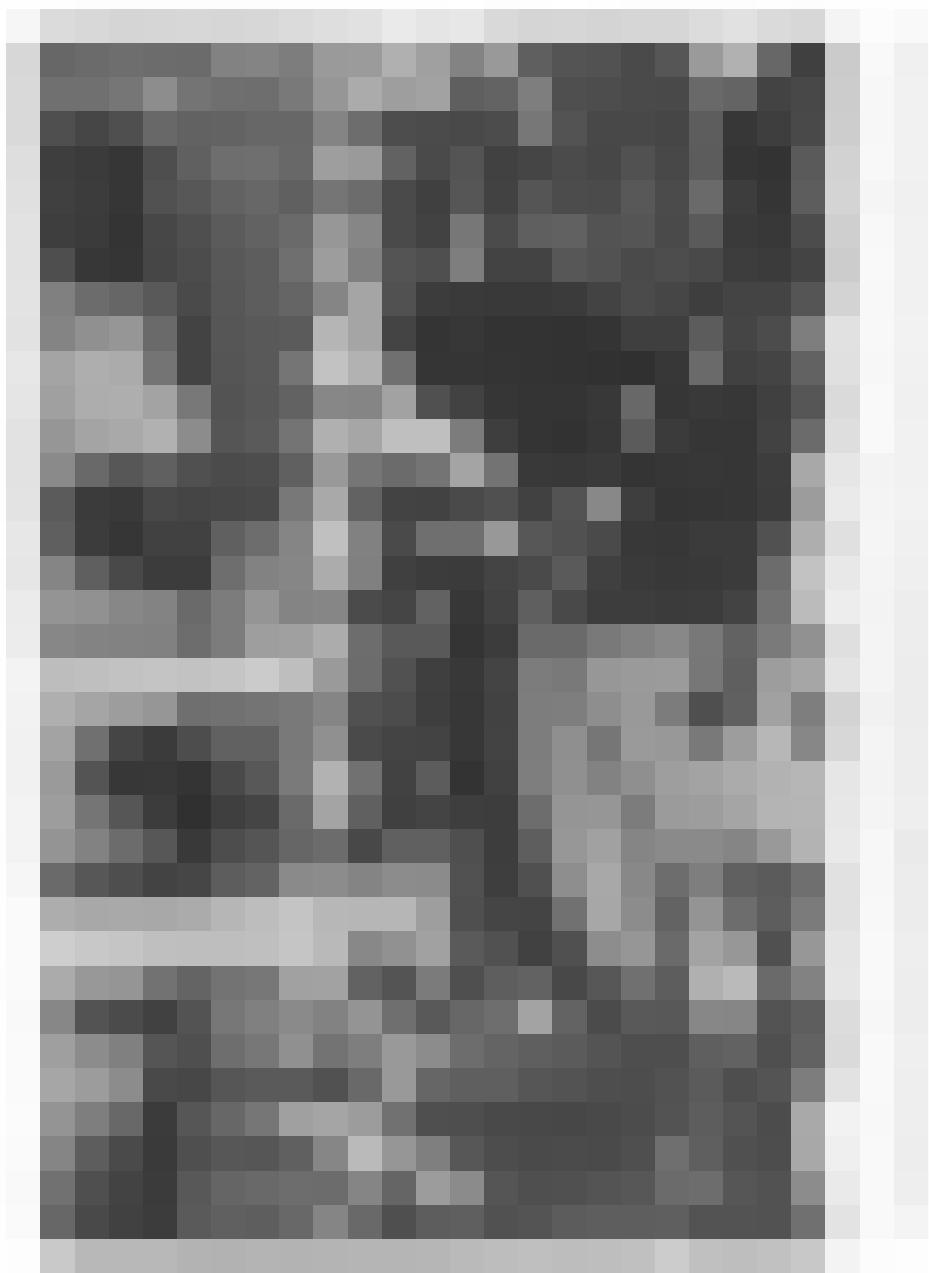
The first congress was notable not only for the importance of the technical work discussed but also for the hospitality offered to the delegates from foreign countries. In few cities of the world is there such opportunity for favorably impressing a visitor, and those who had the privilege of attending this congress enjoyed to the utmost the bounteous entertainment provided by the organizing committee.

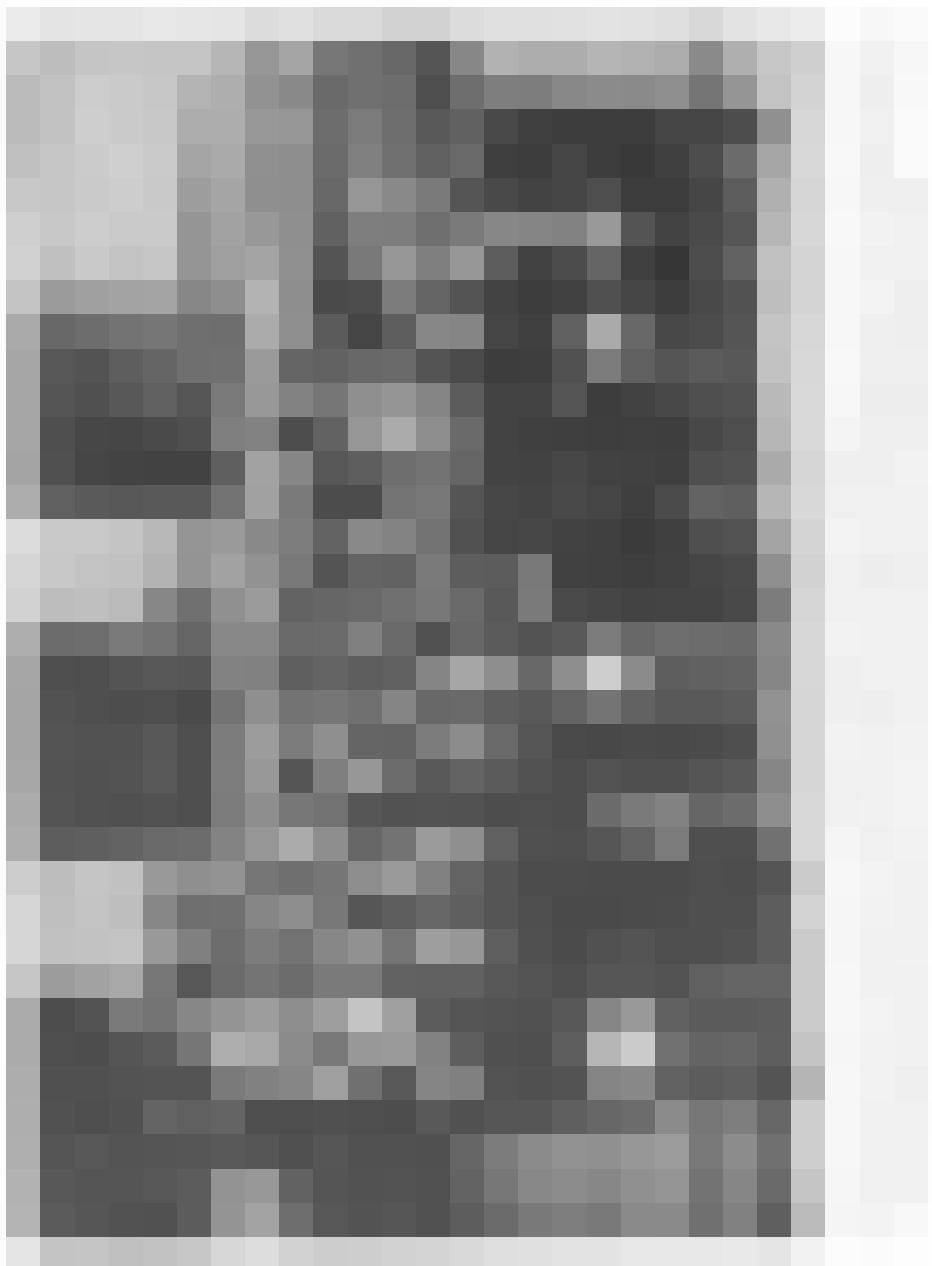
The sessions were held in the spacious National Library building in Rio, part of which was placed at the disposal of the congress through the courtesy of the Government officials. Dr. Lauro Müller, the minister of foreign affairs, presided at the opening meeting and thereafter sent his representative on the occasion of each subsequent reunion.

Following the opening address by Dr. Müller at the inaugural session, speeches were made by Prof. Sylvestre Moreira, of Ecuador; Prof. Frederico Eyer, of Peru; Dr. José Guerra, of the faculty of medicine of Montevideo, Uruguay; Drs. Gustavo Pires de Andrade and Hugo de Andrade, of São Paulo, and by Dr. Sebastião Jordão, the last expressing the appreciation of the congress of the exhibit of dental appliances which had been installed in the library and a large part of which had been sent down to Rio de Janeiro from the United States in the care of special demonstrators.

Of the scientific papers read during the congress many were of exceptional merit, among others being those contributed by Dr.

¹ From data furnished by Reginald Gorham.





Hugo de Andrade, Dr. Jorge Cajiao Candiá, of Bogota, Colombia, and by Dr. Pierre Rosenthal. The laboratory of the dental school was placed at the disposal of Dr. Rosenthal for the further elucidation of his paper, and in order to permit him to make a practical demonstration of an appliance for producing the ultra-violet rays from an electric current.

Other important scientific papers were read by Dr. Pires de Andrade, Dr. Coelho e Souza, Dr. Aristides Espindola, and Dr. Benjamin Gonzaga, while one of the most important contributions was from the pen of Dr. Alberto Patiño, of Bogota, advocating the establishment of a uniform and more rational course of studies in dental colleges throughout the countries of Pan America.

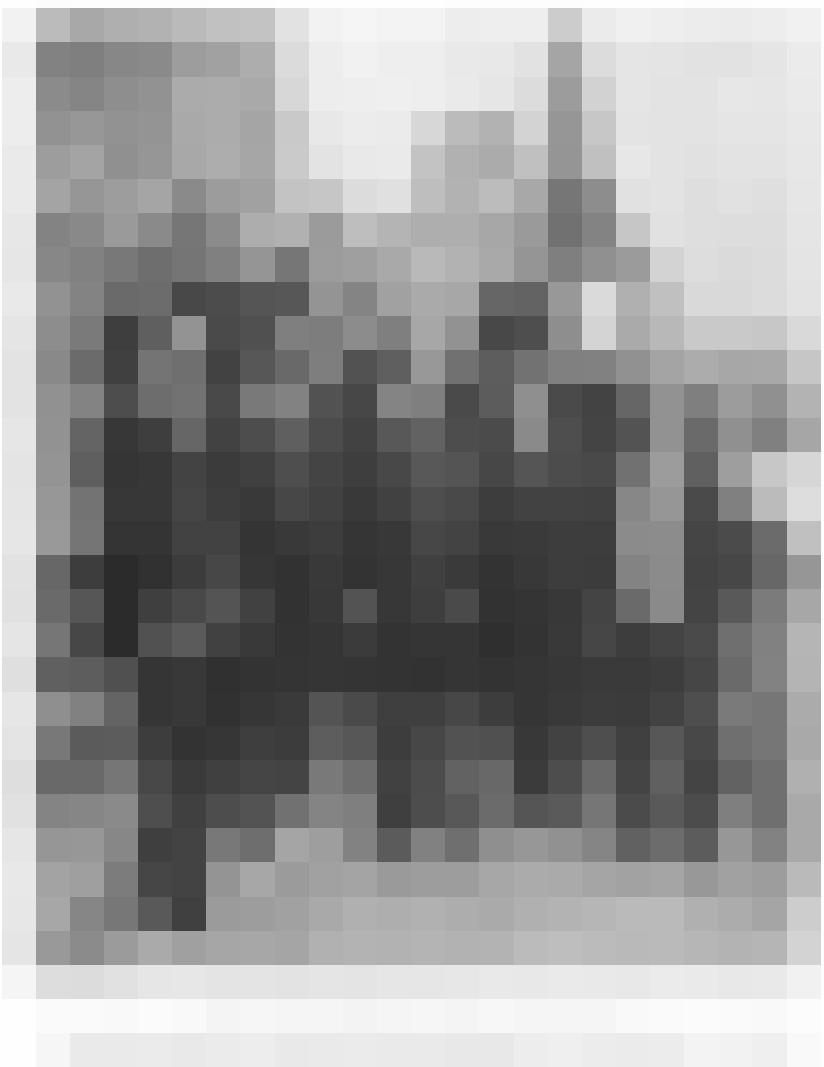
A proposal by Dr. Antonio Sierra, of Uruguay, for the formation of a Pan American dental confederation was transmitted to the congress by Dr. José Guerra and was accepted, the Brazilian Odontological Institute being selected as the headquarters of the federation.

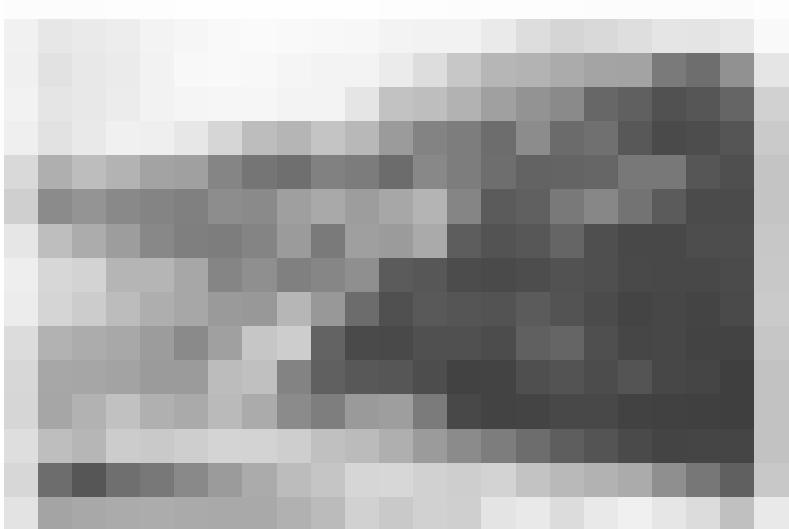
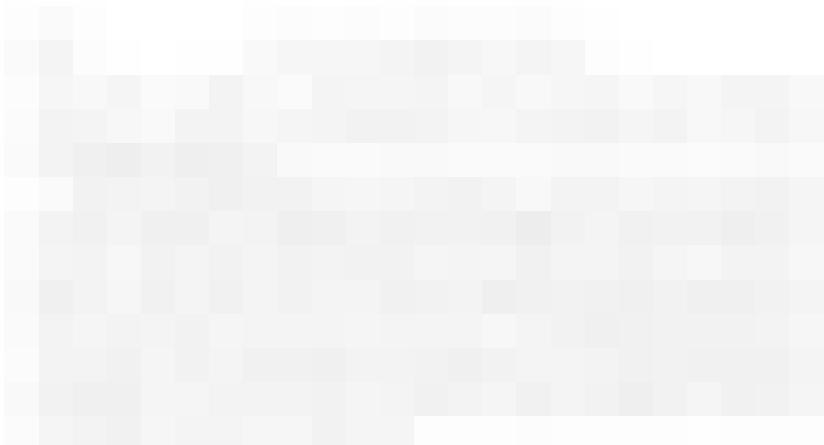
Among the several practical demonstrations which took place at the dental school those of three of the best known dentists of Brazil who were originally from the United States, Drs. Charles and William Hentz and A. R. Shaw, showing a special method of casting gold inlays, attracted especial attention.

Several important resolutions were passed by the congress covering substantially the following subjects: The necessity of a complete autonomy of the medical and dental professions, together with an independent course of instruction; the interchange of ideas between the dental schools of the various countries of North and South America, and urging upon the Governments of these countries the establishment of an obligatory dental-inspection service in schools, both public and private, and an acquaintance on the part of school-teachers with the principles of oral hygiene; a more complete regulation of the profession of dentistry, with the view of excluding from practice those who are incompetent; a recommendation that scholarships should be founded in the various dental schools to afford facilities of travel to such students as may deserve a further opportunity to pursue their studies, etc.

The glorious scenery of Rio de Janeiro offered an irresistible attraction to the visitors, and numerous excursions were organized by the committee of the congress for the benefit of a large number of the dentists and their ladies. One day was spent in Petropolis, the beautiful little summer capital in the mountains about two hours by rail from Rio. Another day was taken up by an automobile excursion around the mountains surrounding the bay. The cars traversed the splendid road up Tijuca, 3,175 feet high, and returned by the Gavea route to the Botanical Gardens, which lay at the base of Rio's most remarkable mountain, the precipitous Corcovado,







A COMMERCIAL TRAVELER IN SOUTH AMERICA¹ :: ::

DEAR MR. EDITOR: A friend of mine, also doing South America for the first time, but not having, so far as I can see, my background of experience in other parts of Latin America, has just read over my earlier letter to the BULLETIN. By the way, he takes the BULLETIN and makes his "house" keep it on file. He found no fault with the character or substance of that letter, but he says that I do not go enough into detail; that I ought to specify hotels; prices on the railway; hours of travel, and other such practical information that a traveler might use. But really, Mr. Editor, I can not agree with him, and I hope you indorse my opinion. In my own experience I have seldom found that very exact data of that kind could always be trusted, because conditions change, and what one man may want another might reject. Moreover, I had planned to give several paragraphs in my last letter (whichever that may be), summing up many such details in a general formula so that it might be applied according to circumstances as a broad average. I trust that this plan meets your approval. Please let me know what you prefer, if it is possible to reach me on my way.

The traveler from the north may climb to La Paz, which means all Bolivia, on the railway up from Mollendo, through Arequipa, and across Lake Titicaca. This is the pleasant route, but not the shortest, from the coast to the capital. If anyone should prefer to go up from Arica to La Paz, because this road has the smallest mileage,² the rapid ascent from sea level to about 14,000 feet must be taken into consideration. Besides, Mollendo offers the break at Arequipa, which otherwise would be missed. (The advantages of this intermediate stop have been explained in my second letter.) In coming north along the west coast the traveler conveniently enters Bolivia through Antofagasta for much the same reasons.

The money of Bolivia is relatively the same as that of Peru. The unit of currency is the boliviano, $12\frac{1}{2}$ of which make exactly £1, which gives to the boliviano a value of \$0.3893. Both the British sovereign and the Peruvian libra are freely used legally and commercially, and I saw no national gold coins. For ready reckoning the boliviano may be estimated at 40 cents United States money. National silver coins are given as change in abundance, and this

¹ The third of a series of 10 articles commencing in the January number of the BULLETIN.

² Via Arica is 440 kilometers or 274 miles; via Mollendo, 844 kilometers or 525 miles; via Antofagasta 1,157 kilometers or 719 miles.

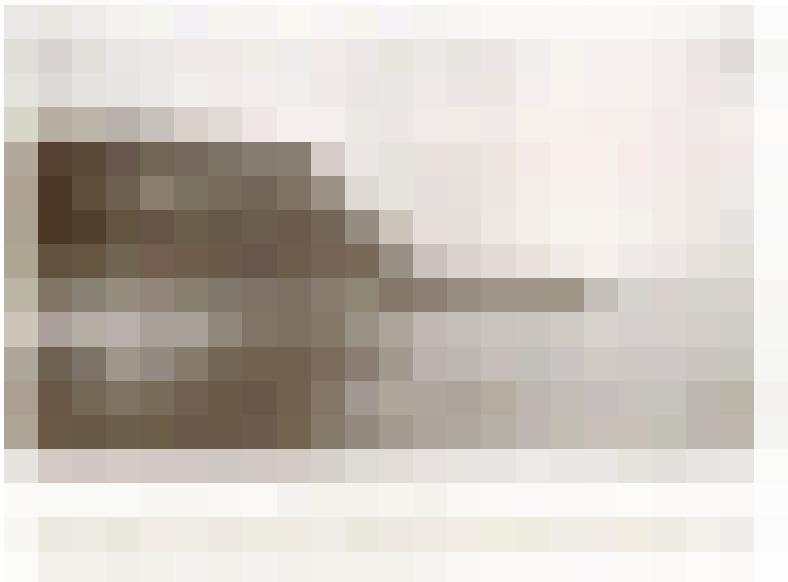
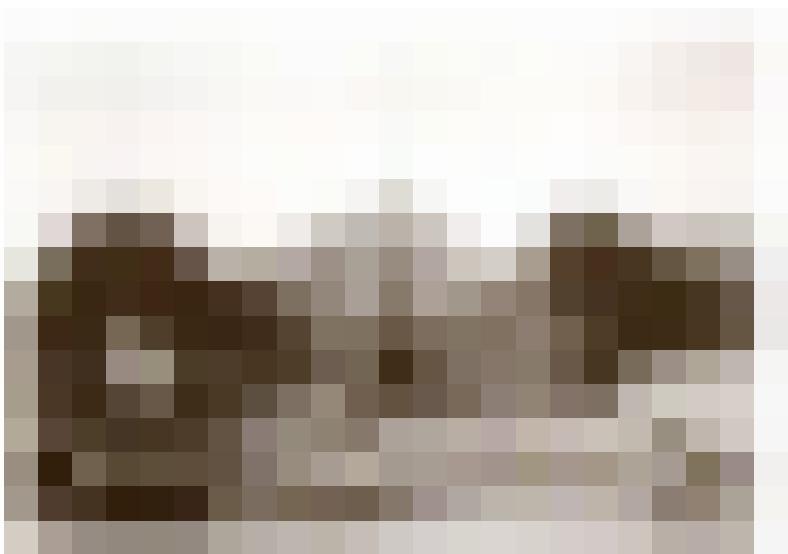


money serves for all ordinary transactions. These consist of bolivianos and fractions, with minor baser coins—some old, some new. A draft on a letter of credit not unusually commands some premium, as there is a brisk call for exchange paper; the holder of such a letter can therefore gain on its face value at times if he is careful. So far I feel correct in my judgment to depend chiefly upon British money, however much it hurt my pride.

I came down from La Paz over the shortest route to the coast. Others may be inclined to do likewise, unless some particular reason demanded that they take the longer route, southward through Bolivia to Antofagasta, although I probably shall try the Antofagasta railway on my second visit. My own personal experience confirmed my choice in this instance. The run can be made from La Paz to Arica in one day, and I hear that a schedule to that effect is under consideration, but when I recently came down it took two days for the 274 miles. I am so accustomed to travel in Latin America, however, that this slower service was grateful to me, as it gave me opportunity to observe better the region through which I was passing.

This western slope of the Andes between the plateau and the ocean is wonderful. For hours after leaving the edge of the cup, at the bottom of which lies La Paz, the train runs along a valley, with considerable green close to the accompanying river, many llamas browsing at leisure on the slopes, a few ruins, a few habitations, but almost no inhabitants. When the river is abandoned by the railway, the surrounding country is bleaker and more barren, and the green gives place to brown. On the morning of the second day of my trip—the afternoon of the one day's schedule—the real wonders began. While still on the upper plateau, a gradual disappearance of the effect of water is noticed, until the degree of what I would like to call absoluteness of freedom from moisture is reached. There is nothing to be seen but rock. No vegetation whatever can be detected, not even a cactus. There is no dust, no particles in the air, no trace of any erosion. So far as I could learn from those who were acquainted with the region there is no record of rain over this part of the plateau.

The highest point of the line is 13,970 feet, and about 50 miles to the west of it begins the rapid descent of 24 miles on a continuous rack system with a grade of 6 per cent, which brings the train down to an elevation of 7,200 feet on another but narrower plateau. Here, if imagination and scientific instruments will permit the euphemism, the absence of moisture becomes still more absolute. Rock without end, no rain, no trace of living thing, and no possibility of growth or change. Old residents of La Paz have told me that when they came down the mountain to the sea, aiming at the pretty town of Taena, they had to be extremely careful in crossing



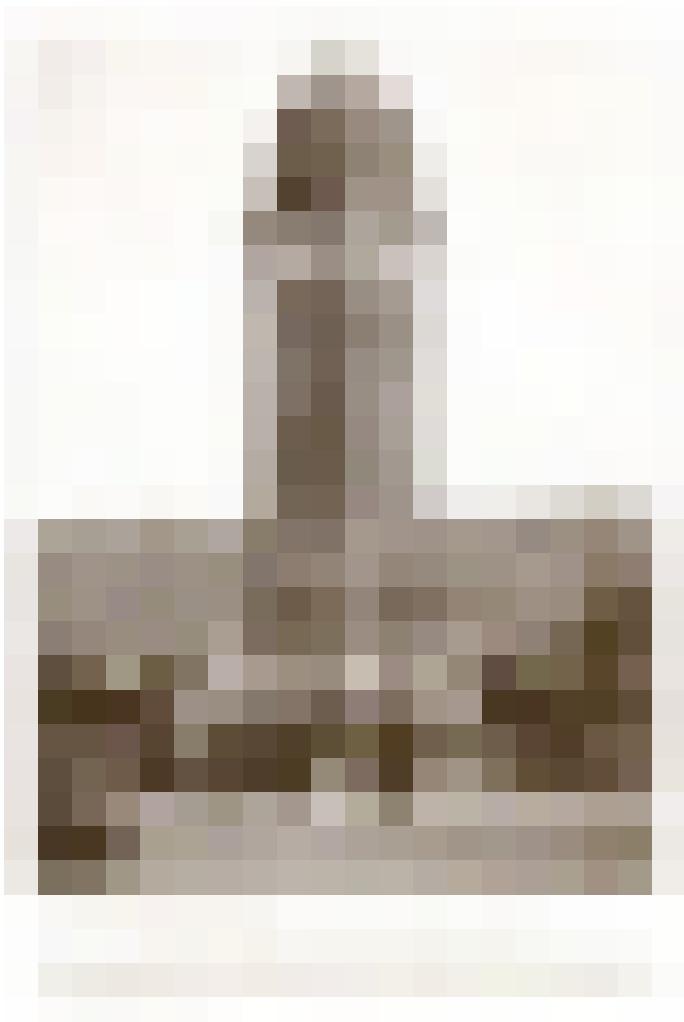
this desert, which then must have taken them a minimum of two hard days, to be sure to have sufficient water for both man and beast. Without water carried with them the trip would be hopeless, and occasionally even now dry bones of perished travelers are discovered off the beaten path where they had strayed away to die, owing to lack of water. The railway constructors overcame this obstacle by carrying water from the snowy uplands in pipes for a hundred miles or more across the barren and sterile rocks. They told me that the water supply to the track laborers in construction times and for the permanent force of to-day was one of the most costly items in all their expense account.

But the point I wish to make in this regard is that on this plateau, at an elevation of about 6,000 feet, where the dryness *is* absolute, and where no germ can live if it must depend upon any food supplied by surrounding nature, is the best place in the world for a sanatorium for the treatment and cure of tuberculosis.

This is my own suggestion, but I invite the scientific world to make note of it. The bacillus of tuberculosis can find here no visible means of support outside the human body, and once the lungs are offered nothing but dry, sterile air, with all the favorable factors of agreeable sunlight, moderate temperature, and suitable elevation, they must reject the noxious bacillus, provided that there is enough lung tissue left to perform a decent function. Of course, the cost of living here, with the necessity of bringing everything to the place, would be excessive. Details of this character must be worked out on an economic basis. The scientific problem, however, is close to solution, now that the railway has opened an entrance to this unique area on the bosom of mother earth.

Pardon me again, Mr. Editor, for such a digression. It will not be the last one, I fear, in these rambling letters, but I warned you in the beginning that they would be, to some extent, made up of impressions, and even a commercial traveler can not escape a note of observation outside of his immediate sphere of action once in a while. There is no hotel at the point mentioned, only a residence for the employees of the railway division, but what short time I saw them they were well nourished and comfortable, demonstrating that even in such an absolute desert life could be happily sustained.

Of Arica I should like to say much, because it represents just that intermediate ground between the old and the new, not alone on the west coast but all over South America, where the past meets the coming century. Arica, and in fact this entire region, has a history. It has played its part in earlier political struggles and has been the port of entry or exit for Bolivia long ago. The valley of the River Lluta gives to its contiguous territory a freshness of green and a local food supply lacking in many somewhat similar ports of Peru and Chile.



Coming down this valley on the railway I noticed abundant signs of agriculture which promise to make the city and surroundings self-supporting. Besides this, the near-by capital of Tacna (by a curious twist of language this word is pronounced almost as if spelled Tagna, although of course pure Spanish would retain the hard c) is a pleasant little oasis in the barren slope immediately about it, and a social resort for those who like to get a bit inland from the ever-present Pacific at Arica itself.

All this savors of the past, especially when one considers that Tacna was the Mecca on the journey from La Paz. A little railway, one of the first in South America so I was told, connects Arica and Tacna, and still retains its former characteristics. Incidentally it should be mentioned that close to this railway lies the skeleton of the United States frigate *Wateree*, tossed upon the sands by a tidal wave in 1868, and can be plainly seen from the train.

Arica of the present and future is bound to grow steadily more important in a commercial sense, as the new railway increases its facilities for transportation to the Bolivian plateaus. By the way, the line to Tacna is no part of the railway to La Paz. I made the mistake of thinking it was, until I actually traveled over the latter. I know that the BULLETIN has given accurate information on this point, but I take this occasion to warn commercial travelers and tourists that to visit Tacna a separate trip must be made from Arica, coming back to the port for a fresh start to La Paz. Arica is a pretty little place, with its shaded plaza, its ocean bathing beach, the Morro frowning above it, and the substantial buildings of both the town and the railway already stirring to the impulses of this modern movement.

To the commercial traveler, therefore, Arica is of decided interest. Already Bolivia has a customhouse here, so that goods imported into the country, and exports of metal from its numerous mines, can pass to their destination with little or no delay. The lines of the railway are close to the water; the *aduana* (customhouse) faces the ocean, and the larger warehouses are conveniently near by. As yet the small pier is inadequate both as to size and depth of water alongside, and can not accommodate steamers, so that all cargoes are transferred by lighters or launches, but the Government has plans to construct proper harbor works, and as the traffic increases the demand will warrant the necessary investment for them.

I dare not with truth say that I found on this trip a startling reward in either sales or promises. Such luck on my first venture could hardly be expected, but I was stimulated by the prospects for the future. I can well imagine a definite progress of Arica when Bolivia begins to boom. Even in the valley—and I include Tacna as well—there is a demand for merchandise of a quality equal to what we in the States produce, but I refer chiefly to the trade which is opened



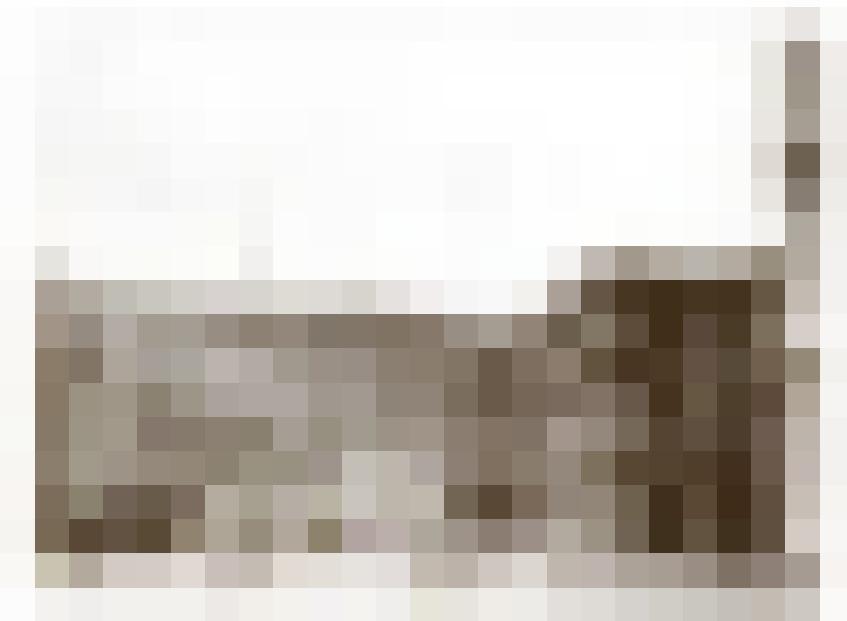
by the railway and representing all Bolivia. This is the shortest haul. To be sure the sea voyage is less by about 100 miles, or a night's run coming down from Panama to Mollendo, than it is to Arica, but the latter is a coming port; at least so it seems to me. From Antofagasta to Bolivia there are some advantages to shipments from Europe or even from the United States via the Strait of Magellan. These technical relations I do not suppose you wish me to dwell upon here; they are suggestions for intimate discussion as any specific case may arise. I call attention to the problem, however, for the benefit of other travelers who intend to consider carefully the possibilities of the west coast.

It was with regret that I left Arica. There are unworthy hotel accommodations in the place, in itself an indication of its increasing business, but the plaza and the club are delightful, and in both one can taste to the full the charm of Latin life. Most steamers, but not all, make a stop at Arica, so that it is wise to consult a schedule before coming down, in order to avoid unnecessary delay, and as I was lucky enough to cover the ground within the four days I had allowed myself, I caught my boat southward, planning to go as direct as the steamer would carry me to Valparaiso.

From Arica to Valparaiso is about 950 miles, depending upon the way the distance is measured. My steamer took from Wednesday afternoon to Saturday evening, including the intermediate calls at various ports on the Chilean coast. Now some one will ask when I make this confession, "But why didn't you stop at some of those big towns like Iquique and Antofagasta"? It is the truth that I skipped them, and I am partly ashamed of myself for so doing, but I just felt that I had to get on to Valparaiso. Perhaps I must confess that I was a wee bit homesick—me homesick, with months of absence in Central America or Mexico, where a telegram could not reach me. I can not explain the feeling exactly, although I know that it existed. I was homesick.

In Central America I was always among friends. If I made new acquaintances we seemed somehow to have other friends in common; and, after all, I was in the northern continent and did not feel very far from home. There are many Yankees traveling or resident in these countries, and a day's journey can not be made without hearing talk of Maine, or Indiana, or California. The gossip of the street, also, has the flavor of North American interests, and many customs are marked by a northern character. I never lost track of the seasons north of the Equator, and everybody knows with what an effort one must adjust one's mind to realize, here in South America, that Christmas Day is about the hottest of the year.

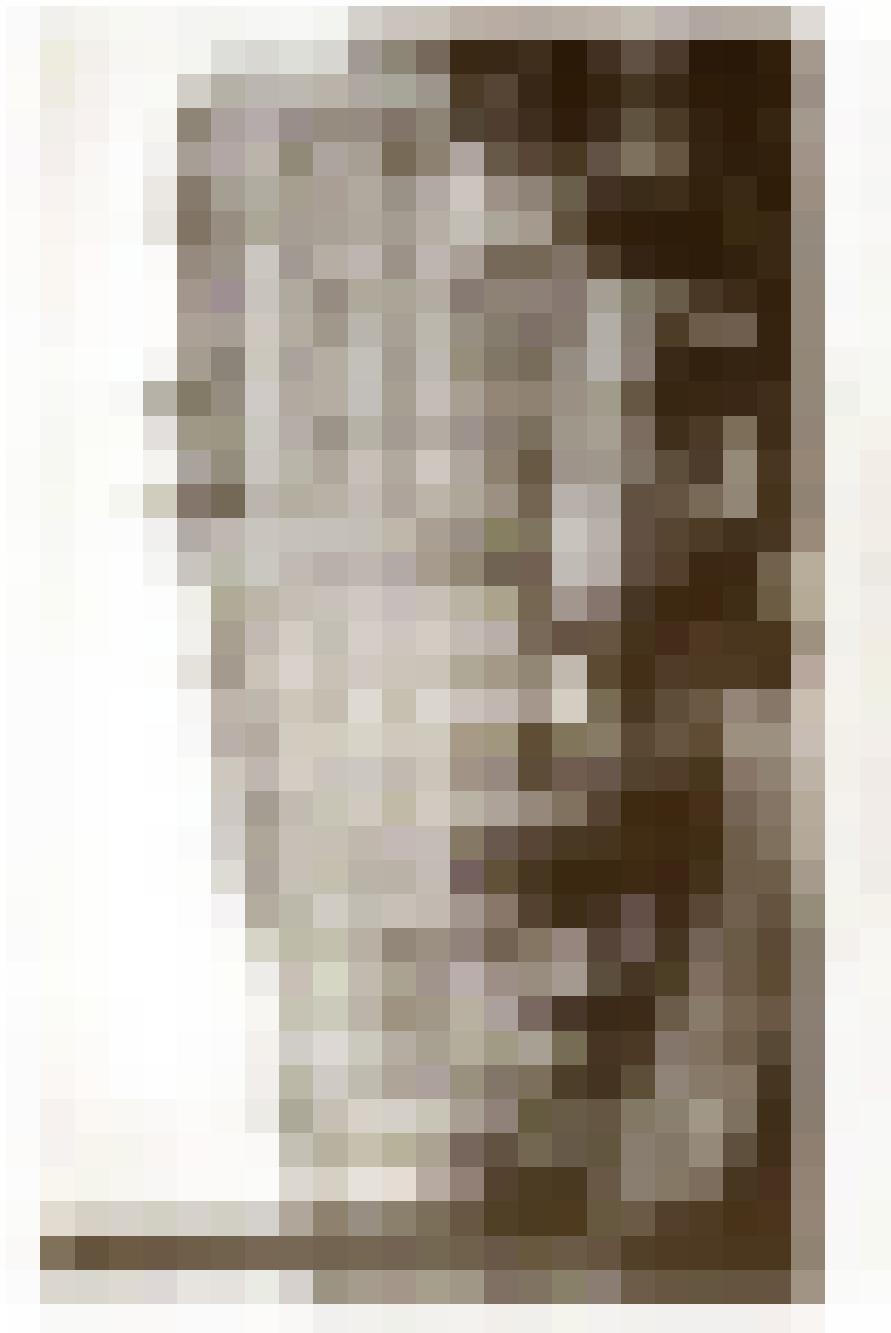
Therefore, let the traveler who for the first time visits South America on a serious errand like the study of foreign markets and the



sale of manufactured wares prepare for the feeling of loneliness which is certain to overwhelm him before he finishes. It will come, sooner or later, and he can not escape it. To have some good resource in such unhappy moments is his most trustworthy remedy. Some clean diversion for the mind and body is necessary at such times. Don't be tempted into drink, or other trouble, is the very best advice and warning I can give the homesick man—and I know what I am talking about, believe me. Many a promising trip I have seen end in disaster when other factors were leading to success, because the poor man suddenly fell victim to momentary glooms and thought he could throw them off by a cheap forgetfulness.

I dare not attempt to explain it, but South America is different from Central America in a subtle way. To be sure the language is Spanish so far as I have gone, although I know that Portuguese is spoken nationally in Brazil. But there is a mysterious something which I have not grasped and which I must penetrate before I recover my assurance and firmness of foot. The language gives me no trouble, yet I find many words in common use in Central America which either have a different meaning in Peru and Chile or are never heard in polite society south of the line. Be careful, then, Mr. Traveler, not to abuse that beautiful language by an indelicate familiarity with it. The people are almost the same—polite, cordial, hospitable, and uniformly courteous. Habits and customs are relatively the same, contrasting no more, on the surface at least, than they do between Massachusetts and Kentucky, Ohio and Texas. The difference is there, however, and must be cognized (I learned that word in college years ago, and never knew how handy it was till now) before it can be fairly met.

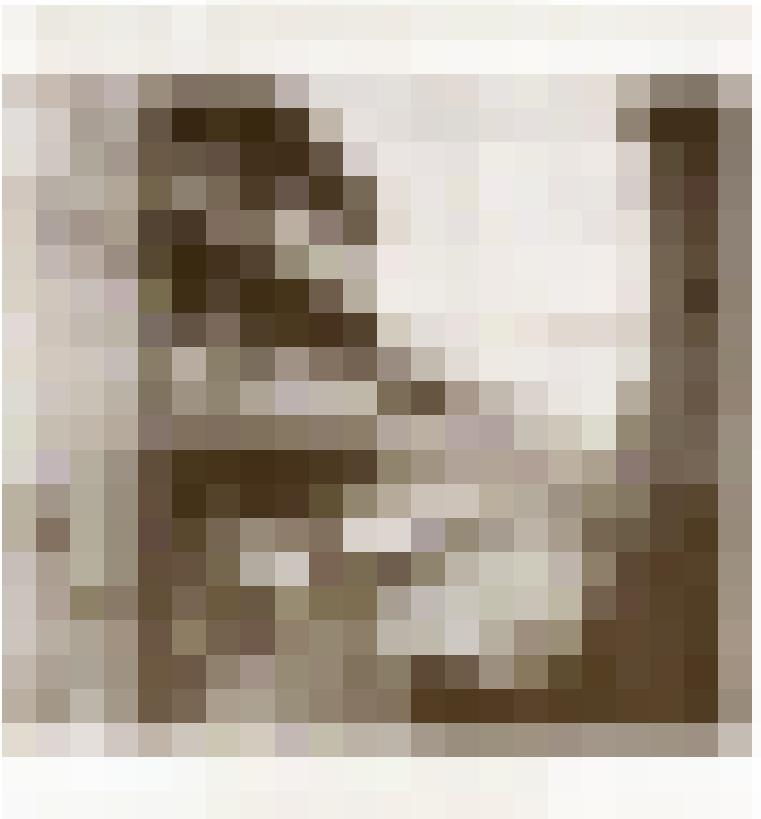
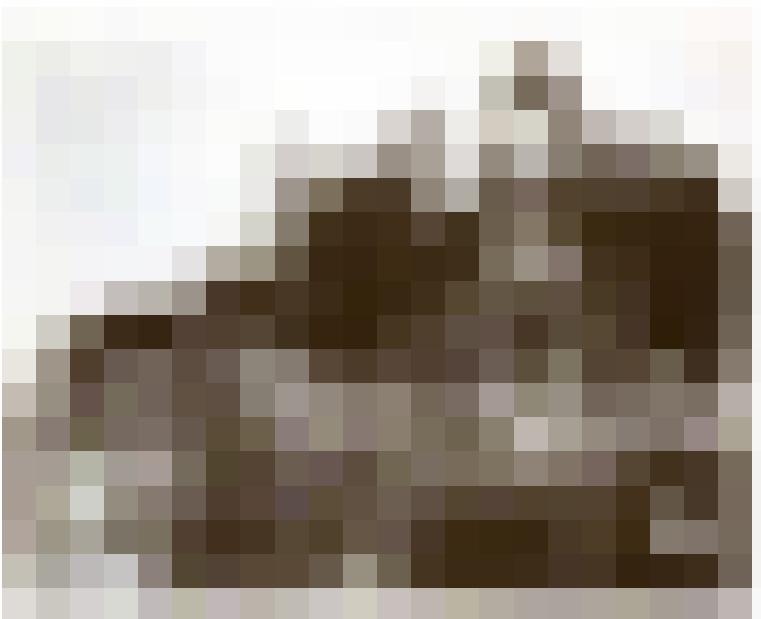
May I attempt to give an explanation of this almost intangible distinction to which I have tried to call attention? I have now covered reasonably well the west coast (please note that this letter is postmarked Puerto Montt, Chile), and can speak from my own experiences and on my own authority, but I am perfectly willing to have my argument controverted, should any of your wiser readers wish to accuse me of error in the matter. Leaving other influences aside, one great factor in the international developments of the earlier times was the constant relationship maintained with Europe, and the very moderate relationship with the United States for many years, in fact, up to almost the last quarter of the past century. As the whole country grew and a foreign trade became more necessary, it was Europe that first and quickest supplied the wants of the people, took their products when they were sent abroad, and from Europe came, as they came to the United States, the willing immigrants to undertake their industries. On the west coast only Chile had a noticeable immigration, but European capital was glad to provide



the strength where native arms had the ambition to undertake material improvements. Thus the feeling that Europe was later a friendly neighbor grew by an uninterrupted intercourse after independence was declared, whereas the United States, removed as it was in a geographical sense, and failing to keep up a foreign commerce while its own interior resources were being so marvellously developed, fell away from an intimacy established in earlier days.

Thus there is in South America a close affinity to all European standards. The people do not know us so well; they are willing to welcome any Yankee who comes to them with an honest and open mind, but he must prove his purpose to be sincere. To be somewhat slangy for the sake of emphasis, I found that I could not arrive until I made good. Europe was already there; the United States had little to do with their commercial prosperity, and my market, however vast its consuming power, could be reached only by my understanding that Europe was my chiefest competitor, and that I must meet these European standards if I were to obtain the success for which I had come to South America. Do I make myself clear, Mr. Editor? It is the failure to grasp conditions of this nature that discourages some commercial men entering the field for the first time. They get homesick, too, but they can't get over it as I did. Their feet get cold and stay cold till they are at last on the steamer headed north for New York or Panama. I knew one man who went as far as Buenos Aires on a fine contract and with a splendid line of goods seemingly wanted in the southern markets, but he lost patience and confidence after three months of absence. He could not understand the people nor interpret their desires in the way I have explained. He felt so far from home. And he gave up his contract, abandoned his tour, and left for the "States" a happier but by no means a wiser man. He left a bad impression, and I warn all travelers to push their itinerary through, for their own reputation, even at the cost of days and days of loneliness.

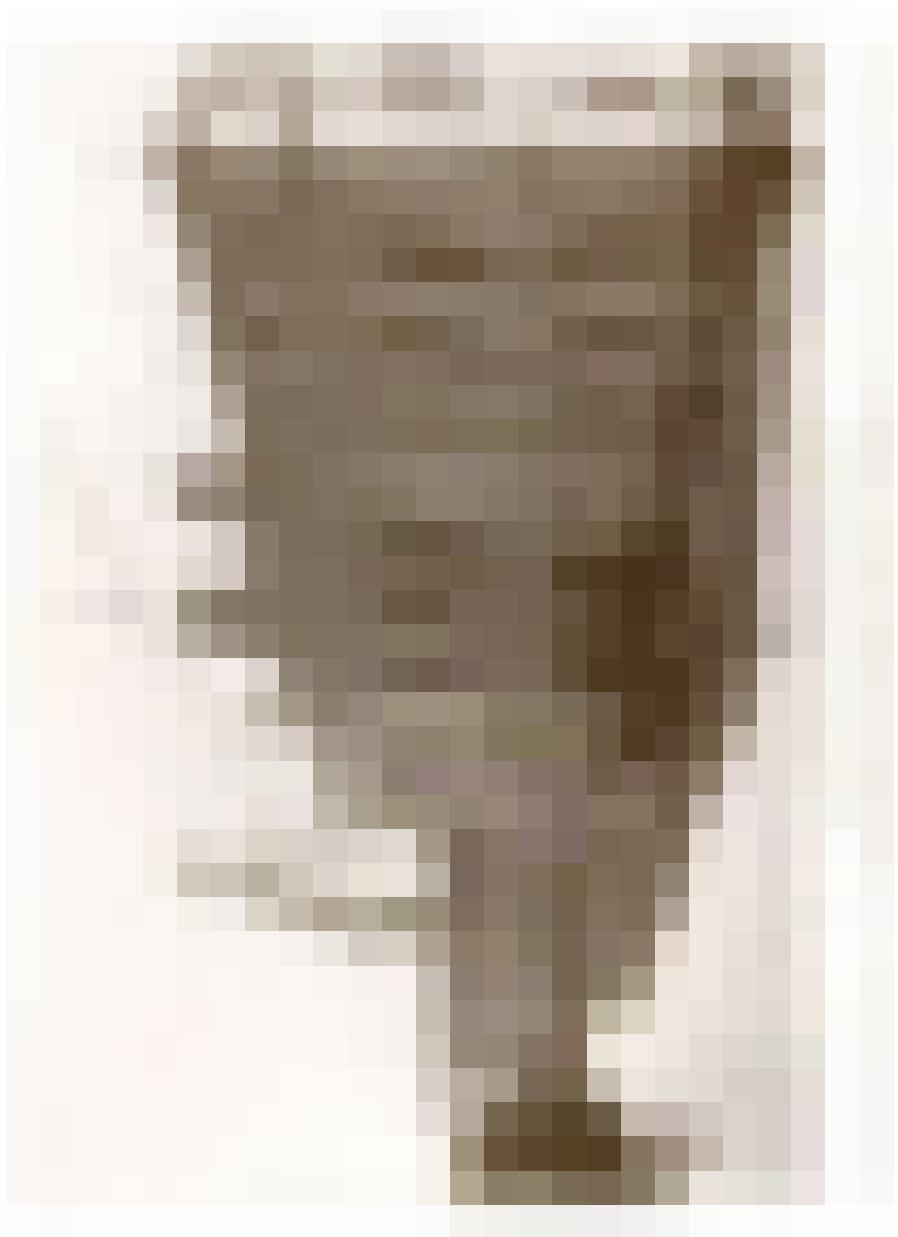
And what is the answer? How can a man overcome his homesickness and break the monotony of the hours when he can not, whether on account of holidays or of waiting for clients, be attending to business? Get a card to a club. This is one solution. Practically every city and town in Latin America, north or south, has a club or casino, and it is no trouble at all to obtain a guest's card. Usually the stranger is invited to make use of the club without formality, especially if the town is small; the steward or porter will recognize him and gladly welcome him to its comfortable shelter. If his stay is to be prolonged for more than a day or so, it is not undignified, in case the invitation has not been immediately extended, to ask for a card, giving, in all justification, the feeling of friendlessness as a reason for longing for its privileges.



There is one danger in club life, and I warn the traveler to avoid it as he would poison. He must not allow himself to take part in any discussion touching politics, whether local, general, or international; nor must he ever permit a word of gossip to pass his lips. I know what I am talking about in this regard. I know the temptations and the misfortune that may follow by yielding to them. It can be taken for granted that no stranger, and especially no traveling man, can pretend to an intimate knowledge of Latin American politics. It is very hard to comprehend, harder still to be formulated into opinions, but all too easy to be the subject of trivial talk. Further analysis of the matter is unnecessary. Keep your mouth shut and think of something else. This is the best rule, even for selfish guidance, that any man can lay down for himself. The same rule applies with equal force to gossip on the social life as on the political life in Latin America. In the latter case, personalities come into play, and common delicacy toward one's hosts must demand a policy of silence. Do not listen to and do not believe what you may accidentally hear.

You may think, Mr. Editor, that these reflections are far removed from the experiences of a traveling man in South America. I assure you, however, that they are very appropriate to the cause. These conclusions are derived from some bitter experiences of my own in Central America, and I realized when I came down here that I should be guided accordingly. I have also known of men who frittered away their time in talk and gossip, thinking that they were acquiring a better acquaintance thereby. Not so. They lost the advantage of a neutrality of attitude, and made no real friends. But just think of the discourtesy of it. Do we respect a German or an Englishman or Turk who comes to our country and expresses undigested opinions on our mode of living and thought? Then let us not be guilty of any indiscretion when we ourselves are abroad. The Latin is so warm-hearted, so hospitable, so impulsively alive to the emotions of both the intellect and the senses that he enters eagerly into conversation on any topic that interests him. I count among some of my best and sincerest friends on earth not a few Latin Americans north of the Equator, and yet I am proud to say that, within the last several years, I have not for one moment allowed myself to discuss with them the mooted questions of their political or social life. They are still my loyal friends.

In the club the stranger has access to the latest newspapers, which he should read carefully for the sake of the Spanish in them. He can make acquaintances, play billards, chess, or similar games. He can learn what is going on, and probably he will have opportunity to take part in functions whereby he sees something of the social or even home life of the people. And this leads me to another hint to the



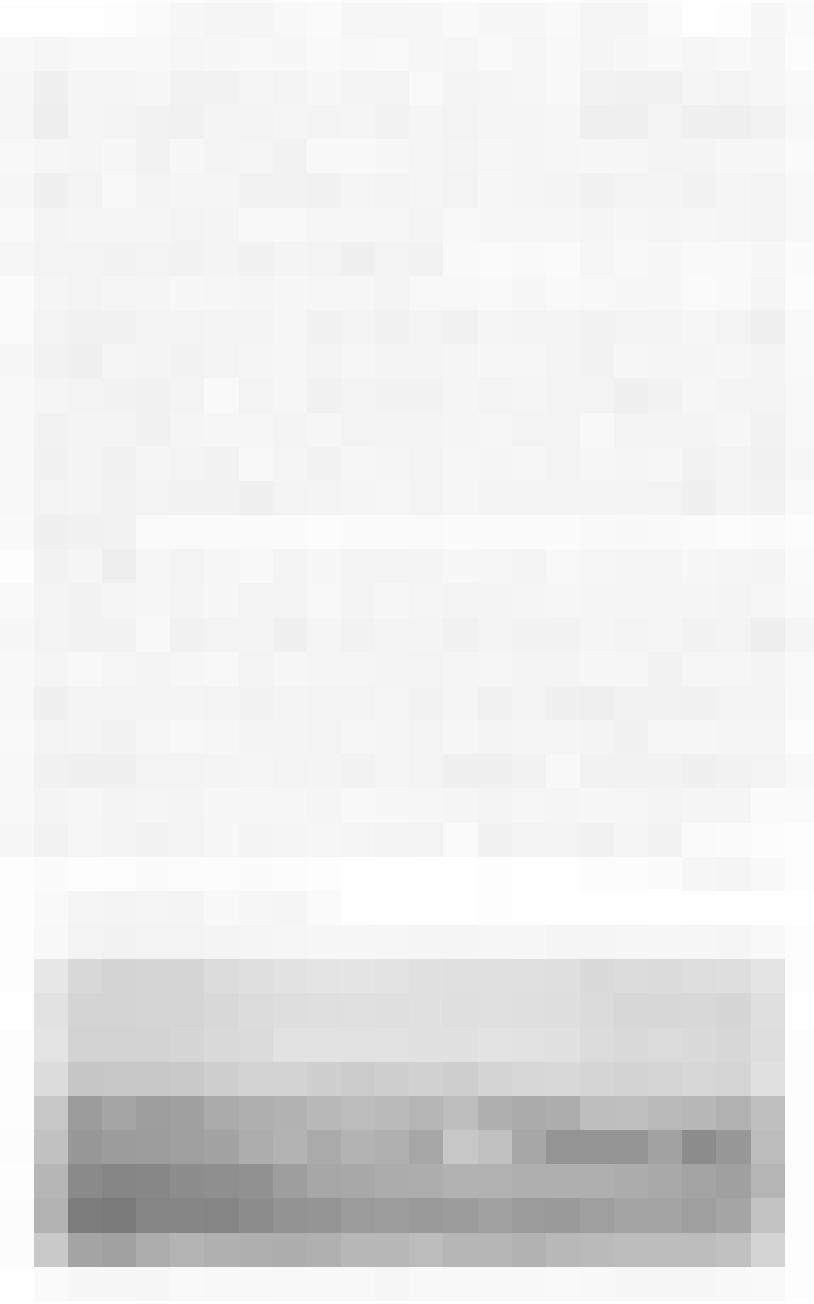
traveler which will be worth knowing. Don't stand aloof and proclaim yourself a stranger all the time. The Latin is so human and so cordial. The differences, socially speaking, between his ways and ours are so slight that there is no cause for awkwardness in any social intercourse where good breeding shows itself. In fact, it is ridiculously astonishing to one who has not really lived in Latin America, as I have, to discover that society there is charming, and conducted by exactly the same rules of intercourse as we like to think control our own society. The ladies talk of about the same subjects, they all dance the same dances, they serve tea at 5 o'clock, and they have lots of wit for conversation. So far in South America I have found no social customs divergent from those I already understand in Central America or in the United States. I have accepted what opportunities for society have been offered me, and have enjoyed them like any other sane Yankee would. If in the long run (although I need not take this other phase of the matter into consideration because I enjoy society for itself alone) I must confess a selfish advantage in showing myself equipped for social life in Latin America, let me acknowledge, for the benefit of those who question its value, that it is good business.

So here I am, having made the run direct from Arica to Valparaiso. I skipped such well-known places as Iquique and Antofagasta, not altogether because I was homesick, but chiefly because I was determined to visit the big cities first, and then to plat out the country in a systematic manner. The northern part of Chile had to wait for another time. There was less regret in my mind on so deciding, because I understand that within a short while the Longitudinal Railway¹ will be opened and then it will not be necessary to depend upon steamers, but the trip up and down the coast can to this extent be made by land.

Valparaiso is the largest factor in Chile's foreign commerce. As I entered the port I was delighted at the freshness and vigor of everything I saw. This was true in itself, I have no doubt, but one of the friends whom I made there, a native Chilean, told me that the earthquake of 1906, instead of having been the disaster it threatened to be, turned out in reality a blessing for the city. The old was wiped away, and the enterprise and ambition of the people produced a restored city of which they may well be proud. To be sure, the docking facilities are as yet inadequate, but work on the new harbor was in progress while I was there, and when the plans are completed Valparaiso can hold its own with any port in Latin America. Enough of the former city remains to preserve its historical back-

¹ This railway opened formally on Nov. 23, 1913, rail connection being then completed. It is probable that regular communication will soon be established between Iquique and Valparaiso. See the English BULLETIN for January, 1914, p. 27.—EDITOR.





ANCIENT TEMPLES AND CITIES OF THE NEW WORLD¹

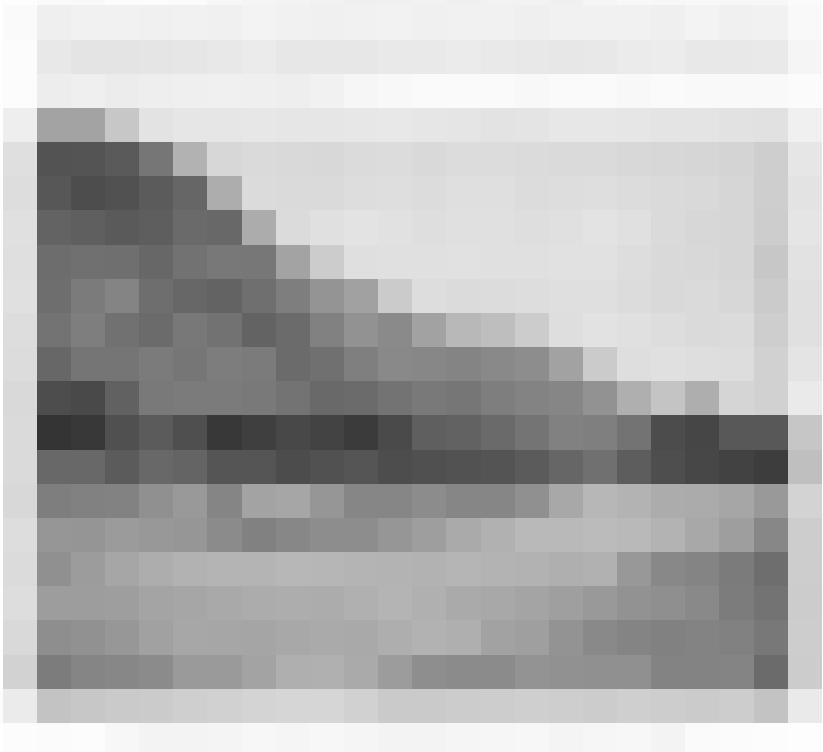
CHAN-CHAN, THE RUINED CHIMU CAPITAL.

MYSTERY abounds in pre-Columbian America, and the farther modern research penetrates into the ancient civilizations of Mexico, Central America, and the west coast of South America the more the mystery of their origin seems to deepen. Among the problems presented to archaeology and anthropology none, perhaps, is more fascinating than that of the Chimus of Peru. What we read of these dwellers of the north coast of the land made famous by the Incas is contained in casual references by the early Spanish chroniclers; what we see of their civilization consists of stupendous ruins near the modern town of Trujillo.

Gazing on these temple and palace walls, richly ornamented in bas-relief, these vast irrigation works, these mounds containing the sepulchers of the great, we can well believe that the Chimus were the rivals of the Incas. For a long time, the Spanish chronicles tell us, the two empires, the Inca in the highlands and the Chimu on the coast, existed side by side, until the conflict came which ended in the supremacy of the "children of the sun." That conflict must have been to the early civilization of South America what the struggle between Rome and Carthage was to the classic world, the analogy being emphasized by the fundamental fact that the Incas, like the Romans, were an inland people expanding by land, while the Chimus, like the Carthaginians, were seafaring conquerors. The Incas came from the south, occupying the deserted strongholds of an ancient race of cyclopean builders; the people of the coast, by tradition, came from the north on a flotilla of rafts. Savants are not agreed on the age of the vestiges found in the valleys they occupied. Some think that there is evidence of two earlier civilizations; others that everything points to a relatively short occupancy of the valleys, extending over only a few centuries prior to the advent of the Spaniards. Racially, the Chimus, in common with nearly all the Pacific coast peoples of South America north of Chile, present the characteristics found among a large portion of the ancient and modern inhabitants of Central America and Yucatan utterly distinct from the highland type of the Inca conquerors.

When Francisco Pizarro, the Spanish conqueror of Peru, reached the Chicama Valley the ancient capital of the Chimus had long been

¹ By Walter Vernier.



in ruins. But the vestiges of past grandeur in this great plain, a hundred miles long, watered by the Chicama, Mansiche, and Viru Rivers, inspired him with the idea of building here the metropolis of the new realm, and he founded the Spanish town of Trujillo close to the ruins of Chan-Chan. How fond this dream of a Spanish metropolis must have been is seen from the name he gave the new settlement, which is that of his native town in Estremadura. Trujillo is reached by a short railroad from Salaverry, a port on the north coast of Peru. On entering the town the traveler finds himself in a corner of old Spain. There are few places in America more suggestive of Spanish colonial life, and there is a saying in Peru that one of Don Quixote's ribs is buried there, by which is meant that Spanish hidalgo traditions survive in that picturesque corner. But Pizarro's dream never came true. There was a time when, according to a Spanish traveler, Trujillo was a large and flourishing city whose merchants amassed wealth by the Panama trade and the great fertility of the surrounding land, but it never equaled Chan-Chan in population or prosperity. There is abundant evidence that the land surrounding the ancient city had been cultivated on a very much larger scale than was ever attempted in Spanish times.

A visit to the ruins of Chan-Chan, also called the Grand Chimu, affords as wide a camp for speculation as does the problem of the origin of their builders. Were these elaborate inclosures, passages, courts, chambers, reaching down to the Pacific Ocean, parts of temples and palaces, or do they include vestiges of huge workshops? Undoubtedly Chan-Chan was not merely a political and religious metropolis, but the center of a densely peopled agricultural and industrial region.

The irrigation works, aqueducts, reservoirs, and canals are on so gigantic a scale as to make it certain that the engineering skill of the Chimus was of the very highest in aboriginal America. The water was brought down from the Muchi River, which was tapped at a considerable distance from the city. The aqueduct is 60 feet high and from the top of the ridge overlooking the city one can trace the plan by which the water was distributed down the slope over the city and the surrounding land. Everywhere are canals and reservoirs irrigating gardens, protected by a wall of great massiveness which ran for miles on the inland side of the city. The detail of the canals suggests differentiation in irrigating land for cotton and corn cultivation, and if Chimu civilization was only a few hundred years old at the time of the Spanish conquest, as some scientists have concluded from anthropological evidence, the problem of its origin, or its introduction into Peru, is one of the most remarkable in all history.

Looking down upon the ruined city, interest centers at once in the magnificent bas-relief decorations, some of them brilliantly colored, of the walls. Here evidently was the palace of the Chimu, whose



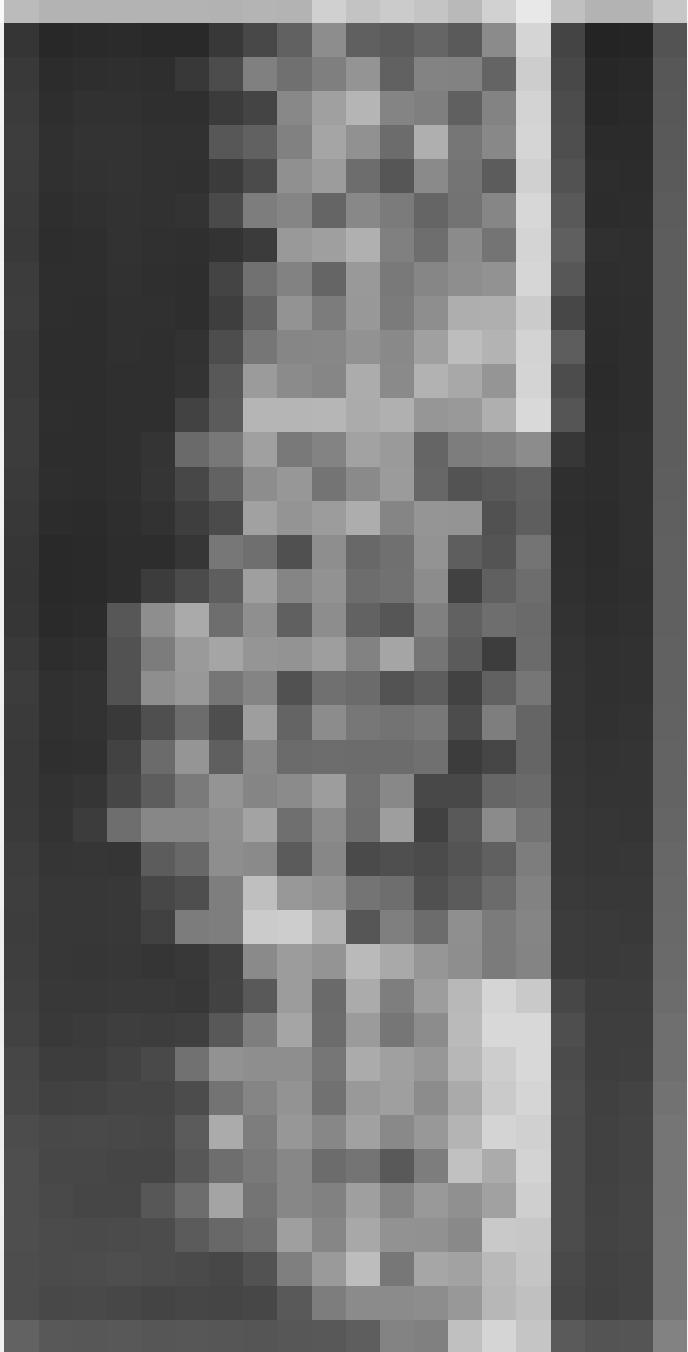
court must have rivaled in splendor that of any oriental potentate. But his power, whether it was despotic or not, was built on the prosperity of the people. That is seen not only in the vast irrigation works but the wealth of textiles, metal ornaments, and especially potteries found in the burial mounds called huacas. As the Spaniards, in their systematic search for buried gold and silver ornaments, practically depleted the huacas, we are not so well able to judge of the Chimu metal workmanship as we are of their art in modeling and painting clay. But their fame as goldsmiths and silversmiths was evidently very great, for after the taking of Chan-Chan by the Inca a large number of them were sent to Cuzco, the Inca capital. It is from their marvelous pottery that we are able to get a glimpse of the Chimu type, of his life, his occupations, customs, manners, morals, and the flora and fauna of the coast.

Of all the pottery for which ancient Peru is famous and which is so conspicuous in our museums, the best comes from Chan-Chan. Most typically Chimu are those vessels representing human figures, heads, and groups, some of them manifestly portraits that must have been very good likenesses. One is struck with the forcefulness of some of those heads and likewise with the great variety of emotions expressed. Some idea of warfare, of religious beliefs, of artistic endeavor may be had from these representations, and the impression of the intellectual level of the Chimus is wholly favorable. On the other hand, there is much that indicates a decidedly low moral standard. In their textile industries the Chimus were aided by the exceptional quality of the cotton grown on the coast of Peru. The apparel and draperies found also show their skill in dyeing.

That all these products were indigenous and not imported by this seafaring people is evidenced by the large number of tools and implements of all kinds that have been unearthed. What was at first thought to be a maze of temple or palace ruins has since been recognized as a series of workshops. There are two such structures inclosed by walls. One has a large reservoir in the middle of a square surrounded by what seem to have been market stalls, as well as many courts, passages, and chambers suggesting the artisans' shops. It is difficult to form a precise idea of the plan of the tangle of passages and structures, but they were evidently laid out for specific purposes; and there are two distinct arrangements traceable in the plan of the city outside the palace, one consisting of parallel streets in large compounds, the other presenting houses grouped around courtyards.

Like other ancient peoples, the Chimus had an elaborate cult of the dead. Burial places are as much in evidence as irrigation canals. The great were buried in mounds, or huacas, of pyramid form, and these are among the most famous monuments in America. Their yield of gold and silver ornaments in Spanish colonial times was enormous, and they were searched for treasure with more industrious





cupidity than any other in Peru, so dazzling had been the original finds. The ransacking began only a few years after the founding of Trujillo in 1535; a baptized chief, Antonio Chayque, having disclosed some of their secrets. The Huaca de Toledo, then called Lomayoahuan, gave up the richest treasures, the records of the royal treasury at Trujillo showing that in 1566 Garcia Gutierrez de Toledo, possibly a relative of the viceroy, Don Francisco de Toledo, who ruled Peru from 1566 to 1581, paid over to the King of Spain 85,000 Castillian gold dollars, being one-fifth of the value of the treasures unearthed. Twelve years later the same official recorded another payment of the fifth part due the Crown, the royal share this time amounting to 61,000 Castillian gold dollars; and again in 1592 the King received 47,000 gold dollars. Thus, the yield in those 26 years from the Huaco de Toledo alone amounted to nearly 1,000,000 Castillian gold dollars, or approximately \$1,750,000 American. These records, which had been preserved by the municipality of Trujillo, perished not many years ago, but there are in existence extracts from which these figures are taken; it is said, however, that the total value of the finds in the Chimú huacas during the three centuries of Spanish rule amounted to no less than \$27,500,000 United States gold. The finds were largely in the nature of gold and silver necklaces, bracelets, belts, diadems, drinking vessels, small ornaments, beautiful textiles, and idols. As late as 1797 a notable treasure, the "peje chico" (the little fish), presumably the idol of the Chimú fish god, was unearthed. It was so called because of a tradition that there exists somewhere in the Huaca de Toledo a much larger fish of solid gold, but the "peje grande," despite frantic search made at various periods, is still a secret. The last futile attempt was made not more than 17 years ago, when a company was formed in Trujillo to lift the treasure.

The Chimú huacas, notably the Toledo and Obispo, which are part of the city, and the Huaca of the Moon, at a distance near the Muchi River, are mounds of enormous dimensions, from 150 to 180 feet high, with a base covering several acres. Shapeless to day, these were erected in terrace form, supporting structures for ceremonial purposes. The passages, chambers, and recesses were once filled with mummies of the Chimú nobility, richly clothed and ornamented, and supplied with vessels and utensils, as though they were to come to life again. Their relatives and retainers were buried above them in such a manner that the humblest were farthest away from their chief. The Huaca of the Moon, according to recent investigators mainly a colossal burial ground, in the opinion of others was the Temple of the Moon, the Si An mentioned in the account of the Spanish friar, Antonio de la Calancha, who was prior of the Augustine monks at Trujillo in the early part of the seventeenth century. Credence is lent to the latter view by the difference in shape of this huaca, which



has a large rectangular base some 100 feet high, on which rests a terraced pyramid of equal height.

What we know of the religious life of the Chimus is of immense interest, because it brings out a fundamental contrast between them and their Inca conquerors. The Inca dynasty, "Children of the Sun," imposed the sun worship on the inhabitants of the Peruvian highlands, which formed the nucleus of their empire. Apparently this cult was in the nature of a dynastic policy rather than a religious belief, comparable, in a measure, to the Divus Cæsar cult of Imperial Rome. The moon worship of the Chimus, on the other hand, appears to have been tribal, or national. The padre Calancha tells us that the moon (*Si*) was worshipped not only because it appears both day and night while the sun only appears by day, but because she was believed to control the elements. Evidently this has reference to the tide being caused by the moon, which is meaningless to a highland people like the subjects of the Incas, but which was a prime factor in the life of the sea-faring Chimus. For the same reason *Ni* (the ocean) was worshipped; *Vis* (the earth) completing the Chimú trinity.

The language of the Chimus, the Muchica, is still spoken in the port of Eten and surroundings, somewhat to the north of the ancient Chimú capital. It is fast dying out, but there is a Muchica grammar, compiled in the seventeenth century by a Spanish priest, Fernando de la Carrera. The work, which was exceedingly rare, is now to be had in a modern edition for which we are indebted to Dr. Gonzalez de la Rosa, and also in a German translation, enriched by a vocabulary collected at Eten, by Dr. E. W. Middendorf. Comparative philology doubtless has an unusually interesting field in the investigation of this language which appears to have no affinity whatever with the Quechua spoken by the Inca's subjects and which may prove the key to the problem of Chimú origin. It may be added, as a matter of curiosity, that what has been said of so many Indian dialects on the Pacific coast refers particularly to the Muchica, namely, that it is understood by the Chinese coolies who were introduced into Peru in the last century.

The tradition of an arrival from the north by sea, on a fleet of rafts, does not refer to the Chimus but to one of the tribes conquered by them, which had settled at Lambayeque, north of Chan-Chan; but as the most recent anthropological research has shown all of the crania found on the Peruvian coast, except those accounted for by the highland invasion of the Incas, to present the same type of short heads, it may be assumed that whatever clue that tradition may offer holds good for the Chimus themselves. Their empire eventually stretched along the north Peruvian coast for over 600 miles, embracing 21 valleys of cultivable land from Tumbez in the north to Paramunca in the south. Chimú influence, however, is in evidence much farther

south, extending to the adjoining Chincha confederacy of the southern valleys. Their kindred origin, aside from anthropological reasons, is suggested in the religious cult of the southern tribes, famous for the ancient temple and oracle of the fish god Pachacamae.

The empire of the Grand Chimu, as the sovereign holding court at Chan-Chan was called, was finally conquered by the Incas, some 120 or 150 years before the arrival of the Spaniards. It is not known at what period the conflict began between the two empires, but the irresistible expansion of the Incas must have been felt at the coast at an early time, and their struggle with the powerful and rich Chimu sovereigns was undoubtedly long and bitter. Garcilaso de la Vega, the son of one of Pizarro's companions in the conquest and of an Inca princess, in his Royal Commentaries of Peru, gives a graphic description of the campaign that ended in the fall and destruction of Chan-Chan. Under the ninth Inca, Pachacuteec, the highland empire had been extended as far as Cajamarea, somewhat to the northeast of the Chimu capital. The subjection of the coast valleys was begun and the southern chieftains reduced without great difficulty. The whole Inca power was then concentrated on the struggle with the Grand Chimu, and an army of 30,000 seasoned soldiers concentrated in the Rimac Valley, near the modern Peruvian capital, under the command of the prince royal, Inca Yupanqui, who had served in the many brilliant campaigns of his uncle, Kapac Inca Yupanqui, brother of the emperor, and one of the most famous warriors of pre-Columbian America. The Inca army, swelled by the contingents of numerous subject chieftains, marched to the borders of the Chimu domain, whence the prince dispatched a messenger demanding the Grand Chimu's acknowledgment of Inca suzerainty. A contemptuous answer being returned, his empire was invaded and after severe and prolonged fighting the Chimu troops, together with the inhabitants, were driven north from valley to valley.

The Grand Chimu, who is described as possessed of more force of character than generalship, made his last stand in the Santa Valley when the arrival of a second Inca army of 20,000 made further resistance hopeless. Abandoned by his vassals he humbled his pride in the hope of saving the remnant of his people and in person made submission in the camp of the Inca prince. Inca Yupanqui's words were kind, but the destruction of the center of Chimu power was carried out ruthlessly, recalling the "Carthago delenda" of Roman policy. Chan-Chan fell only after the Incas had succeeded in destroying the irrigation works. The inhabitants were transplanted to various points of the highland empire, the artisans were taken to Inca centers, notably the capital, Cuzco, and military colonies were established on the coast under the protection of strong fortifications. The ancient moon cult of the Chimus was suppressed to give place to the dynastic worship of the "Children of the Sun."

ABORIGINES OF SOUTH AMERICA¹

AMONG the most valued of recent accessions to the Columbus Memorial Library of the Pan American Union is the remarkable contribution to the ethnology of the ancient peoples of South America published under the title "Aborigines of South America." The author, Col. George Earl Church, died January 4, 1910, before he had completed the manuscript of his notable work. Had he lived for but another year, the book would have doubtless been of even wider scope and covered the entire field. Fortunately the uncompleted manuscript was given into the hands of Sir Clements Markham, the one man whose sympathetic appreciation of Col. Church as a coworker and personal friend, added to his own extensive knowledge of the subject, made him the best fitted to edit the fruits of the author's labors.

In the *MONTHLY BULLETIN* of March, 1909, appeared a biographical sketch of Col. Church, in which is mentioned the fact that "he is now devoting all his spare time to the study of the South American aborigines. This leads us to hope that he may ultimately publish a work on this extremely intricate subject." Through the kindly offices of Sir Clements Markham this hope has now been realized, even though the author's lamented death prevented the full fruition of the arduous task.

In his introduction Col. Church presents a graphic and fascinating picture of that vast region of South America known as the Amazon Basin, both as it was in the ages of the dim past and as it is to-day, as may be seen from the following excerpt:

As we stand on the Andean threshold of Amazonia we receive impressions such as are impossible in lands which have been tamed down by civilization. We get nearer to God than any prayer can place us, and there we fully comprehend how infinitesimally unimportant we are in the scheme of the universe. As our thoughts wander over the vast area which almost belts a continent we are irresistibly translated to the Age of Discovery and imbibe its spirit of romance. We are bold navigators, explorers, and conquistadores; we play with the destinies of barbaric kingdoms, and march through wonderland in search of new empires to conquer; like Orellano, we launch our craft upon gigantic and mysterious rivers which seem to flow interminably onward in search of the ocean; all around us are tribes of wild men as savage as the puma and jaguar which they hunt; we find that the lowlands are a forested world floating on the bosom of the fresh-water sea which Pinzon named Santa Maria de la Mar Dulce; and, overlooking all, we see the inland range of the Andes with its re-

¹ "Aborigines of South America," by the late Col. George Earl Church. Edited by an old friend, Clements R. Markham, K. C. B. London. Chapman and Hall (Ltd.), 1912. Price, 10 shillings 6 pence.

splendid crests and gigantic counterforts, and, everywhere, nature working on a grand scale, tearing down and building up with terrible vigor.

At the date of the discovery of the New World the human mind in Europe had been educated to its maximum power of credulity; hence, for a period of two centuries afterwards easy credence was given to the fantastic tales which peopled Amazonia with bands of female warriors and which told of the rich empires of Paytiti, Omaguas, and Enim and of the golden city of Manoa and its dorado king. Many expeditions sailed from the shores of Europe to conquer these fabled lands, and even the followers of Pizarro, unsatiated with the plunder of Peru, organized bands of adventurers to subdue countries of such dazzling wealth. But on every margin of Amazonia nature had placed forbidding and formidable barriers, and if any hardy and indomitable conquistador succeeded in crossing the border he found himself confronted by countless obstacles against which his courage and endurance battled in vain.

A broad belt of rugged, tropical, river-cut country lies between Amazonia and the coast of Brazil; the highlands, jungles, and swamps of the French, Dutch, English, and Venezuelan Guayanás almost forbid access to it from the north; wild regions of Matto Grosso and southeastern Bolivia separate it from the Plata Valley; on the west and southwest are the Andes piercing the clouds with an endless line of cold, sharp teeth. From the Pacific coast it is no easy task to reach even the margin of the primeval forests. For a distance of nearly 2,000 miles, from Santa Cruz de la Sierra to Quito, innumerable torrential streams descend the eastern slope of inland cordillera and constantly swelling in volume present ever-increasing difficulties to the penetration of the great valley from the west.

Many learned works have been written on the origin of man in the New World, and there have not been wanting erudite scholars who locate the Garden of Eden at the eastern base of the mighty peak of Sorata or Illampu; others who can lift the veil to an immensely remote antiquity and tell us when man first appeared in South America. Its habitable areas were probably well populated at a period coeval with the Pliocene land mammalia, the remains of which are found in such abundance in southeastern Bolivia, the Argentine Republic, and Brazil.

The relations of the South American aborigines to each other were largely governed, at least for many thousands of years, by the inland seas which extended from the Ventana and Curumalal Mountains of Buenos Aires to the water divide between the Amazon and Orinoco Basins, if not to the Caribbean Sea. The aggregate area of these—the Pampean Sea, the Mojos Lake, and the Amazon Sea—was about 1,115,000 square miles. Together they separated South America into two grand divisions, the Brazilian and Andean. The inhabitants of each must have had their own peculiar and distinctive ethnological development, for communication with them was barred by a width of about 400 miles of water. One land link alone, lying east and west between 17° and 19° south latitude, connected the two parts of the continent. The difficulties of its transit were formidable, but it is still the only one in use. It separated the Pampean Sea from the Mojos Lake and served as a great intertribal bridge.

The great change in the topography of this vast region, due to the eventual drainage of these great bodies of water, is outlined as follows:

When the Amazon Sea and Mojos Lake were almost drained by finding an outlet to the Atlantic, nearly the entire lacustrine and fluvial features of Amazonia underwent a marked transformation. The gigantic rivers Madeira, Purus, Jurua, and Rio Negro, and the Yapura and numerous secondary streams, were formed from the drainage of the eastern flanks of the Andes. These crossed the old lake beds and gave to the Amazon sufficient volume to keep its track open to the ocean. The area previously occupied by the Amazon Sea became a dense forest, which even now is yearly flooded to a width of 400 miles. It is in bold contrast to the unforested part of the bed of the

ancient Mojos Lake, over the black soil of which in the dry season one may wander, as I can attest, for hundreds of miles without finding a pebble.

Coexistent with these huge bodies of water, a great lake, much larger than Lake Superior, occupied part of the Andean plateau. It is known as Titicaca, and is now not a tenth of its former area. Its desiccation still continues.

At present the rain-laden, northeast trade winds, after crossing the Guayanás and northern Brazil, beat themselves dry against the eastern flanks of the Andes, but when they were resaturated from the Amazon sea and Mojos lake, and, after sweeping across the narrow inland cordillera, again refreshed from Lake Titicaca, they must have carried sufficient moisture over the whole Andean region to fertilize not alone its tablelands, but, in connection with the Pampean sea, the great northwestern deserts of Argentina and the arid belt of the Pacific coast, thus making the whole of Peru, Bolivia, and the Atacama districts of Chile and Argentina a delightful and fruitful habitat for man and animal life in general * * *

As Lake Titicaca and other Andean lakes and the inland seas slowly disappeared the climatic conditions of South America underwent a radical change; the Andean plateaux and Pacific coast lands lost their fertility, thus imposing on their inhabitants an increasingly severe struggle for existence and causing the survivors to crowd into the valleys and ravines that had partly escaped the general desiccation.

With the alteration of the physical conditions of the interior of the continent, the valleys of the eastern slope of the Andes gradually became accessible to the savage hordes of the lowlands, abundant in the low-lying districts, if we may judge of Amazonia as we find it to-day. The countless rivers rewarded the fishermen only during the cool season, when the water was clear. Nuts, honey, wild fruits, roots, the pith of certain palms, birds, monkeys, tapirs, deer, fish, alligators, tortoises, anteaters, lizards, snakes, and other reptiles and grubs were the general diet of the savage.

The immense areas of lowland forests, yearly flooded, the loneliness and gloom of their existence, and the constant warfare of stealth and cunning against all the living species of the tropical jungles, led to the migration of the tribes and their invasion of the eastern Andean slopes. The continual change of habitation, the lack of a common purpose and of permanent conditions, the endless battles among themselves for advantageous locations, all tended to disintegration. No language common to the various tribes existed, and often change of location resulted in changes of the tribal speech. Hence the difficulties of an ethnological study of these aboriginal tribes who dominated the great continent for so many centuries.

In the first chapter of his book Col. Church deals with that region of Brazil now covered by the States of Parana, Santa Catharina, Rio Grande do Sul, and Missiones, and the Republic of Paraguay, a territory aggregating twice the area of France, and which, according to the author, was the original home of the Caraio race (Caribs), which later spread over the greater part of South America until it extended its incursions into Guiana and finally to the Antilles. The theory of the origin of this warlike race, the history of its conquests, the description of the numerous tribes who owed their ancestry to the original Caraio stock are dealt with in an original manner and based on extended investigation and personal research. Succeeding chap-

PAN AMERICAN NOTES

SECRETARY OF STATE BRYAN TO VISIT SOUTH AMERICA.

Probably the most interesting recent development in connection with Pan American affairs is the acceptance by the chairman of the governing board of the Pan American Union, Hon. William Jennings Bryan, Secretary of State of the United States, of the cordial invitation of the Chilean Government to visit Chile at the time of the meeting of the Fifth Pan American Conference, which will assemble in Santiago, its capital, about the end of November of this year. At the March meeting of the governing board, attended by nearly all of the ambassadors and ministers of Latin America now in Washington and the Secretary of State of the United States, Señor Don Eduardo Suárez, the minister of Chile, announced that his Government had extended this invitation to the chairman of the board. In presenting this announcement, Minister Suárez felicitously expressed the hope of his Government and people that Secretary Bryan would accept the invitation. The chairman, replying, said that, although he had some time ago determined to undertake no more extended trips abroad, he was happy to make an exception in this instance, and that he would gladly accept the invitation, with, of course, the proviso that he is not prevented by unexpected developments in the foreign affairs of the United States. As now planned, Secretary Bryan will probably leave Washington about the 1st of November and proceed directly to Santiago by the way of the Panama Canal, stopping en route at Peru and Bolivia. After spending some days in Santiago attending the opening of the conference, he will proceed to Argentina, Uruguay, Paraguay, and Brazil on his way back to the United States. In planning a journey of this kind, the Secretary of State has two interesting precedents: The first, in the visit of Secretary Root to South America in 1906, when he attended the opening of the Third Pan American Conference at Rio de Janeiro; and the second, in the visit of Secretary Knox to the countries of Central America and the Caribbean in 1912. It is also interesting to bear in mind that it will be the second visit of Secretary Bryan to South America, his first having been made four years ago in 1910.

THE DIRECTOR GENERAL'S TRIP TO SOUTH AMERICA.

The governing board of the Pan American Union has officially authorized the Director General to attend the Fifth Pan American Conference, which will meet in Santiago the latter part of this year. This action was taken at a recent meeting of the board and is in accordance with the regulations of the Union, which require that the Director General shall attend the Pan American Conferences. Inasmuch,

moreover, as the Director General has been kept closely in attendance to his duties in Washington for several years without an extended leave of absence and an opportunity to revisit the principal countries of South America, it seems advisable that he should undertake a journey of this kind, not only to be present at the conference, but to visit other countries en route and returning. It is now probable that he will leave Washington about the 1st of September, proceeding first to Brazil, thence to Uruguay, Paraguay, Argentina, and then to Chile, to be there during the session of the conference. When this gathering is concluded, he will proceed north by way of Bolivia, Peru, Ecuador, Colombia, and Venezuela.

INTERNATIONAL CONGRESS OF CHAMBERS OF COMMERCE.

When the permanent committee of the International Congress of Chambers of Commerce assembles in Brussels during the month of March, 1914, the occasion will mark another step in preparation for the sixth gathering of this important organization. The practical effects of the fifth congress which met at Boston and other points in the United States during the fall of 1912 have impressed the delegates who came from all parts of the world with the importance of such assemblies, and there is every reason to believe that the sixth congress which will meet at Paris, June, 1914, will be even greater in its representation and scope. Mr. Edward A. Filene, of Boston, one of the vice presidents of the previous congress and member of the permanent committee, sailed from New York on March 4 to attend the meetings at Brussels. In a communication to the Director General, conveying this information, there is expressed the hope that the Pan American countries which were so largely and ably represented at Boston would again be strongly represented at Paris.

ARGENTINE COMMERCE IN 1913.

In connection with the bill now before the United States Congress to raise the legation of the United States at Buenos Aires to the rank of an embassy, the details which have just been received in regard to the foreign commerce of the Argentine Republic are of timely interest. The figures compiled by the Bureau of Statistics of that country show that its foreign trade for 1913 reached the unprecedented total of 904,857,089 Argentine gold pesos, equal to \$873,187,090 in United States money, or an increase of nearly 40,000,000 pesos over its foreign trade in 1912. The exports were 483,504,547 Argentine gold pesos, or \$466,581,888, while the imports amounted to 421,352,542 Argentine gold pesos, or \$406,605,203. This reveals an excess of exports over imports of 62,152,005 Argentine gold pesos, or \$59,976,-685. With a population estimated between eight and nine millions of people, the Argentine Republic boasts of the largest foreign trade per

capita, approximately \$100, not only of any nation of the Western Hemisphere but of any important nation of the world. Late reports from Buenos Aires, the capital, indicate that the population of that city has reached the one million five hundred thousand mark in contrast to the eight hundred thousand of 10 years ago, making it the fourth city of the Western Hemisphere, ranking after New York, Chicago, and Philadelphia, and the most populous capital on the American Continents.

THE PEACE TREATY BETWEEN COSTA RICA AND THE UNITED STATES.

The treaty of peace, as negotiated by Secretary of State Bryan, has just been signed with the Republic of Costa Rica. This makes the twelfth treaty of the same character. The Latin American Republics are among the earliest to adopt the idea, as Bolivia only last month signed a similar treaty and now all the five Central American Republics, Panama and the Dominican Republic, have done likewise. The agreement provides for an investigation by an international commission, for a year, of all misunderstandings between the two countries, which can not be adjusted by diplomatic means.

CELEBRATIONS ON WASHINGTON'S BIRTHDAY.

The ministers to France from the Latin American Republics were guests on February 21, at a luncheon given by Ambassador Myron T. Herrick at the embassy in Paris, in celebration of Washington's birthday. The ambassador spoke of the common problems of self-government presented to all the peoples of America, and offered a very earnest plea for a mutual understanding of each other's motives and purposes, with a suggestion that outside influences be not permitted to alter reciprocal relations. A banquet was held later under the auspices of the American Club in Paris, which was well attended by many other Americans resident in the city. Speeches were here made by the ambassador, Hon. Myron T. Herrick, by the consul general, Mr. Alexander H. Thackara, and by the rector of the American church of the Holy Trinity, all of whom paid tribute to the memory of Washington. Receptions in commemoration of the same national holiday were given in Rome by the ambassador Hon. Thomas Nelson Page; and in Berne, Switzerland, by the American minister, Hon. P. A. Stovall.

CONGRATULATIONS TO SEÑOR YOACHAM.

The Director General takes this opportunity, in his own behalf and in that of the staff of the Pan American Union, thus publicly to congratulate Señor Alberto Yoacham, who is now minister from Chile to Bolivia. Señor Yoacham was secretary and chargé d'affaires of the Chilean legation in Washington three years ago, and in that position he was active on the governing board as a friend of the

organization, and when he was transferred to another post he left many friends behind him. Announcement has been made of his marriage, in La Paz, Bolivia, to Señorita Carmen Saldias Guillot, daughter of the minister from the Argentine Republic to Bolivia. The wedding at the cathedral was a brilliant affair, attended by the President of the Republic, Gen. Ismael Montes, and the members of the diplomatic corps.

THE PAN AMERICAN SOCIETY OF THE PACIFIC COAST.

Information has just been received by the Director General that the Pan American Society of the Pacific coast has elected officers for the current year. These gentlemen are as follows: President, Col. D. C. Collier; first vice president, Mr. E. Mejia; second vice president, Dr. David P. Barrows; third vice president, Dr. Eugenio Dahne; chairman of executive committee, Prof. P. A. Martin; secretary and treasurer, Mr. William Fisher. This committee is composed of these members—Mr. Juan M. Chavez, Mr. G. A. Davidson, Mr. F. B. Maldonado, Dr. Juan Padilla, and Mr. J. Rosseter. This is an important organization, and plans to represent on the Pacific coast the work and energy of the general Pan American Society which has its head office in New York City; in fact the western society hopes eventually to be made a part of the parent society. In view of the approaching date for the opening of the Panama-Pacific Exposition, in which Latin America will surely have a worthy exhibit, this society will have abundant opportunity to exercise its activities. As visitors from Latin America will be numerous in San Francisco during the exposition, the society should be known to them so that all may thus find means of becoming acquainted. The address of the Pan American Society of the Pacific coast is 219 Italian-American Bank Building, San Francisco.

BOSTON AND LATIN-AMERICAN TRADE.

That the recent excursion of the Boston Chamber of Commerce to South America is producing results is shown in various ways. The foreign trade committee of the chamber is conducting an active propaganda for securing a larger share of Latin-American trade. Ex-Mayor John F. Fitzgerald, whose second term as chief executive of Boston expired last February, is the chairman of this committee, and is injecting his accustomed energy and enterprise into the plans for awakening the exporting interests of New England to new opportunities. Improvement in shipping facilities, better acquaintance with Latin-American needs and methods of doing business, study of Spanish in the public schools, and a general effort to become more familiar with commercial and social conditions obtaining in the other American nations are being urged. The positive necessity for sending men who are familiar with the language of the country in which they

hope to do business is stressed, and commercial bodies are advised to cooperate in providing means to furnish instruction in such languages to representatives of exporting houses who contemplate entering this field. In other words, intelligent effort is being made to show the manufacturers and exporters of the United States what is necessary to enter the field of Latin-American commerce, and proper attention to the lines along which the campaign is being conducted will, with patience and perseverance, be followed by favorable results.

CUBAN PAVILION AT THE SAN FRANCISCO EXPOSITION.

President Menocal of Cuba has appointed Gen. Enrique Loinaz del Castillo as commissioner for Cuba at the Panama-Pacific Exposition. He will soon depart from Habana to take up the work assigned to him, which in this case is one of exceptional interest, because it implies something more than a supervision of ordinary work. In fact, the Government of Cuba has detailed native workmen who will construct the Cuban pavilion on the exposition grounds for the housing of the exhibits of the products of the Island, and every effort is to be made to give an atmosphere to grounds, building and exhibit which will be reminiscent of Cuba and the beauties for which the Island is famous.

A SOUTH AMERICAN VIOLIN VIRTUOSO.

Andres Dalmau, of Rosario, Argentina, has been making a tour of Central and South America, and has won for himself lasting fame by his wonderful playing on the violin. In Lima he was even proclaimed as a second Kubelik or Elman. Dalmau was born in Rosario in 1885, the son of a well-known tenor of that city, the family having been celebrated for their musical talent for several generations past. As a young man, after commendable progress in his own country in his studies, he was sent to Spain to continue his artistic work, and from there he began his professional career. He has given almost 2,000 concerts in Spain, Portugal, and France, and in the chief cities of South America. Besides his performance on the violin he is also a composer, and has already received 14 gold medals for his original productions. In Rio de Janeiro Dalmau was received with enthusiasm almost unbounded, and everywhere he has gone music critics have unhesitatingly acknowledged his remarkable talent. It is to be hoped that he may soon be invited to give concerts in the United States.

THE SECRETARY OF THE LEGATION OF ARGENTINA.

In the January, 1914, issue of the BULLETIN there appeared the portrait of Señor Dr. Eduardo Labougle, first secretary of the legation of the Argentine Republic, who is one of the popular younger members of the diplomatic corps at Washington. Secretary Labougle

holds the degree of doctor of laws from the National University of Buenos Aires. In 1905 he held an official position in the Department of Foreign Affairs of his country, and three years later was Acting Director of the Department of Worship and Internal Affairs (Director en Comisión de la Sección Culto y Asuntos Privados). Dr. Labougle has also been director of the protocol division and discharged the duties of second chief of the American division of the foreign office. During the centennial celebration of Chile, Dr. Labougle was honored with the position of secretary general and chief of the protocol of the Argentine representation. On January 1, 1911, he was appointed first secretary of the Argentine legation at Amsterdam, from which post he was transferred to the post at Washington in June, 1913.

BUREAU OF INFORMATION OF COLOMBIA.

The Pan American Union has recently received the following announcement informing it of the establishment at Washington of a special information department by the Republic of Colombia. The circular states:

The legation of the Republic of Colombia announces the establishment of a bureau of information in the city of Washington, D. C., under the direction of Señor Henry Coronado, with headquarters at the Riggs Building.

Information, statistics, and other data concerning the commercial, industrial, and educational activities of Colombia will be gladly furnished gratis upon request.

The BULLETIN extends its best wishes to Señor Coronado in his new charge and feels that his department will have a long period of practical usefulness, judging from the numerous inquiries which are received at the Pan American Union concerning the progress, resources, and opportunities of that country.

COMMERCIAL OPPORTUNITIES IN CHILE.

In view of the various tours which representative commercial organizations in the United States are making to the countries of South America for the purpose of developing a still greater exchange of social and commercial activities, manufacturers, and capitalists will find interest in the following extracts translated from a communication received by the Director General from Sr. Don Eduardo Carrasco, chief of the commercial section of the department of foreign affairs of Chile. After discussing the desire to attract North American capital to that country, Sr. Carrasco makes the following comment on some of its resources:

Forests.—We have 200,000 square kilometers (77,220 square miles) of forest lands less than 200 kilometers (124 miles) from the seacoast, from which the timber could be readily exported to the United States. The United States now imports nearly \$15,000,000 worth of lumber of this grade. The woods in these forests are suitable for construction purposes, railroad ties, furniture, etc.

Agricultural lands.—There is also available an equal area of land suitable for cultivation which can be bought for \$3 to \$30 an acre. These lands are adaptable to fruit culture, and Chile's climate is such as to make her an important factor in the fruit markets of the world.

Opportunities also exist for the construction of ports; railroads, for the development of copper, iron, gold, and silver mines; and for an investment of over \$5,000,000 in the erection of hotels.

STUDY OF LATIN AMERICA AT THE HIGH SCHOOL OF BURLINGTON, VT.

Through the interest shown by Senator Carroll S. Page, of Vermont, the Pan American Union had opportunity to forward early in the present year a set of its recent publications dealing with conditions of a general nature in the American Republics to the high school at Burlington, Vt. It is a pleasure to note with what eagerness these pamphlets have been received and to what practical use they have been put. Senator Page has kindly sent to the Director General a letter from Mr. Irving V. Cobleigh, of that high school, in which he states that the class in commercial geography is gaining much information from them, and it would appear that they serve practically as a textbook on the general subject of Latin America. Stimulus has also been thereby given to secure a commercial museum for the school. This communication is particularly gratifying because these publications aim to give the most accurate information on the Republics, their industries, products, railways and waterways, means of approach to them, as well as their areas, populations, governments, and institutions. While errors have undoubtedly crept in, they are not frequent, and every effort is always made to avoid them. A better proof of their practical usefulness could therefore hardly be found than that they fill the wants of such a well-equipped high school as that in Burlington is known to be.

THE ARGENTINE BATTLESHIP "RIVADAVIA."

During a great storm on Thursday, February 19, the *Rivadavia* was taken to sea and soon after was submitted to official tests as to her qualifications. She made her turning and backing tests at 15 knots, and then steamed on her economy test of 450 miles, steaming 30 hours at 15 knots an hour. All requirements were met, and the *Rivadavia* returned to Boston in prime condition. The vessel is now to take on screen coal and will then be put to the 8-hour high-speed test, which will include backing at full speed. Again in Boston she takes on ammunition and clears the decks for the gun test. If all these tests are satisfactorily met, and there is no indication that the battleship can fail in any one of them, the *Rivadavia* will then be delivered over to the Argentine Government, a demonstration of what can be accomplished in a United States ship-construction yard.

PAN AMERICA IN THE MAGAZINES :: ::

A Chapter of Ancient American History, by Herbert J. Spinden, in the January (1914) issue of the American Museum Journal, New York, is an interesting article dealing with the historical features of the ancient city of Chichen Itza in Yucatan, based on a study of the ruins in regard to traditions, inscriptions, and natural developments in art. Incidentally the article embraces an excellent description of a number of the ruined palaces, temples, etc., which, however, may be passed over in this review, since a detailed and profusely illustrated article by Sylvanus G. Morley appeared in the **MONTHLY BULLETIN** for March, 1911, which covered this phase of the study much along the same lines. Dr. Spinden, who is the assistant curator of the department of anthropology of the American Museum of Natural History, finds that a study of the ruins throws considerable light on the history of this all but forgotten city. He writes:

The wreck of human handicraft touches the heart, and none of us can fail to invest a ruined city with the purple haze of romance. At least it is safe to say that not a traveler in Yucatan and Central America but has been deeply stirred by the vestiges of ancient empire that lie scattered through the jungle. The ruins of Chichen Itza, long famous on account of their size, accessibility, and healthful situation, have been explained by fanciful tales or wrapped in impenetrable mystery according to the mood or stock of information of the person describing them. It does not detract from the wonder of this city or the grandeur of its buildings to say that the light of recorded history, somewhat faintly to be sure, shines upon its foundation, its periods of brilliancy and decadence, and its final abandonment.

After giving brief descriptions of the Castle, or temple, which stands on the huge pyramid which first strikes the visitor upon sighting the ruins; the sanctuary behind it; the Monjas, or Nunnery; the Akat'cib, or House of the Dark Writing; the Casa Colorada; the Temple of the High Priest's Grave; the Temple of the Jaguars; Temple of the Tables, etc., the writer examines the question of Chichen Itza's history as follows:

When Grijalva and Cortez sailed their caravels to the low-lying, palm-fringed coast of Yucatan in 1517 and 1518, they found the Maya Indians in a state of advancement that excited wonder and admiration. Yet we know from many documents that not a single one of the great stone-built cities was really occupied at this time. Great trees were growing from the roofs of the buildings at Uxmal, and while Chichen Itza was a place of pilgrimage and sacrifice, it is pretty clear that the temples we have just seen were all abandoned and in partial ruin. To restore the history of Chichen Itza we must review our knowledge of the other great Maya cities situated not only in northern Yucatan but also far to the south and west in Guatemala and Honduras.

The restoration of Maya history depends upon three lines of study, which must be carefully brought into relation each with the others, namely, traditions, inscriptions, and natural developments in art. The first of these is, at first sight, most intelligible. Brief chronicles, called Books of Chilan Balam, were preserved at several towns in northern Yucatan. These chronicles were written in Spanish letters but in Maya words by educated Maya Indians during the sixteenth and seventeenth centuries, and were doubtless based upon earlier native documents which contained hieroglyphs and pictures. The events of history recorded in these chronicles are fixed with reference to the katuns or 20-year periods of Maya chronology. These katuns are distinguished from each other by the numbers 1 to 13, which fall in a peculiar order. Any date in the chronicles is definite for a cycle of 13 times 20, or 260 years. But by putting down all the katuns which passed, whether or not there were historical entries opposite them, the Maya historian prevented confusion in the 260-year cycles and actually carried the historical count over a stretch of 70 katuns, or 1,400 years, before the coming of the Spaniards.

Now let us glance at the second line of research, the inscriptions. These are found on monolithic monuments, lintels, tablets, and other objects. The inscriptions of the greatest value to the student of ancient American history are those expressing dates in the so-called archaic Maya calendar. This archaic calendar is essentially the same as the one used in the Books of Chilan Balam so far as the length of the katun is concerned, but by another system of naming the katuns the danger of confusing the 260-year cycles is overcome. Dates in the archaic calendar are exact over vast stretches of time. The most valuable data are found in what is called the initial series, and of these over 50 have been deciphered. The initial series is really a number which records the days which intervene between a beginning day, in all cases the same, and the day given in the inscription. We count the years from the birth of Christ, the Maya count the days from a beginning day that according to our system falls about 3600 B. C. Nearly all the initial series dates known occur at the southern cities of the Maya area, but one very important date of this sort occurs at Chichen Itza. It is this date which has made possible a correlation of the archaic Maya calendar with that used in the Books of Chilan Balam.

To associate these dates with events Dr. Spinden explains the third line of research, namely, the study of progressive changes in style of sculpture and progressive adaptation of superior mechanical devices in architecture, etc., and by carefully coordinating these three lines of study he shows that an outline of the course of Maya history is made possible. He presents this outline as follows:

Now let us see what place Chichen Itza occupies in this historical vista. Several of the chronicles relate that Chichen Itza was discovered during a residence of the Itza at Bacalar on the east coast of Yucatan. By the term "discovered" is probably meant that the cenotes (natural wells made by the falling in of the roof of a subterranean river) which made habitation possible were discovered. The settlement was made about 450 A. D. at a time when the southern cities, such as Copan and Tikal, were entering upon their most brilliant epoch. It seems certain, however, that Chichen Itza was only a mediocre provincial town at this time. Only one dated stone has been found and this is poorly carved. The date upon it corresponds to 603 A. D. Shortly after this date Chichen Itza was abandoned and the Itza went to the land of Chanputun, near Campeche, where they stayed, according to the chronicles, for 260 years. Somewhere near the middle of the tenth century they made their way back to the north and reestablished Chichen Itza. At about the same time Uxmal and Mayapan were likewise founded and a league between the three was instituted. This League of Mayapan, as it is commonly called, endured

for over 200 hundred years and controlled the destinies of northern Yucatan. Trouble between the allies broke out with the plot of Hunac Ceel, the chief of Mayapan, and as a result the hereditary ruler of Chichen Itza was driven out in 1176. A disastrous war lasting 34 years took place and the ruler of Mayapan seems to have enlisted seven warriors from the highlands of Mexico under his standard. These men have Nahua names. In all probability the conquered city was given over to them as the spoils of war at the end of the long contest. * * * Civil wars rent the land and while we can not put an exact date on the final fall and abandonment of Chichen Itza and Uxmal it is probable that these events occurred somewhere in the fourteenth century. Mayapan, the last city to survive, fell in 1442. * * *

This, in brief, is the story of Chichen Itza. Founded when the Huns under Attila were battling with the failing armies of Rome, it was abandoned for the first time when Mohammed was laying the leaven of Arab conquest. Reestablished in the era of the Saxon kings, it flourished during the Crusades and lost its freedom to a foreign power when our fathers were struggling for the Magna Charta, and sank into oblivion while the English and French fought out the Hundred Years' War. Surely a city with such a history can hardly be dismissed as void of interest and inspiration.

Battling with the Panama Slides, by William Joseph Showalter, in the February (1914) issue of the National Geographic Magazine, is the graphic story of the stupendous struggle of the United States Army Engineers with the titanic forces of nature, a seemingly unending, nerve-racking, heart-breaking battle which nothing save sublime courage with unconquerable will could hope to win. Mr. Showalter tells us not only of the almost incredible physical obstacles that were overcome, but he shows us the human side of the picture, the disappointments, the mental strain, the constant thwarting of hope, the aching of the hearts of those magnificent specimens of American manhood who have about won the fight.

In the many stories that have been written relative to the Panama Canal more or less has been said about the slides, but for the most part in a very superficial way, giving the reader but a vague idea of their general character. In Mr. Showalter's story the facts are presented in such a graphic manner that at least that portion of the reading public which enjoys the National Geographic Magazine will be awakened to the realities of this phase of the giant task and will feel an increased admiration and a deeper respect for the men who have blotted out the word "despair" from the lexicon of the army engineer. The following excerpts give some little idea of the story:

The only reason why ships have not been using the Panama Canal since last October is that nature has been battling to the last ditch in her efforts to thwart the purpose of man to put a shipway through the vitals of proud old Culebra Mountain. But for this great battle Culebra Cut would have been a finished job two years ago.

The weapons used by nature in her efforts to confound the plans of the canal engineers have been slides and breaks in the banks of the canal, and effective weapons indeed have they proven. How, with them, she has stood between the canal army and the completion of the task to which it addressed itself constitutes the most thrilling episode in the history of canal engineering.

Over 250 acres of ground lying outside of the intended banks of the canal, and containing over 30 million cubic yards of material, have swept, with silent but terrific

force, down into the canal. Now this onslaught has demoralized an entire railroad system; now it has put the compressed-air and water systems out of commission; now it has bottled up one end of Culebra Cut with an avalanche of débris; now it has imprisoned dirt trains and wrecked steam shovels. But with all the wreck and ruin and chaos there have been men with wills of iron who have met each new situation with a new spirit of determination; men who have never permitted any catastrophe to turn them aside from their ultimate purpose; men whose achievements in the face of unprecedented difficulties make a story as inspiring as anything in human history. * * *

Consider what the removal of 30 million cubic yards of material means. It is enough to build a sort of Chinese wall 7 feet thick and 7 feet high reaching from New York to San Francisco. It is more than could be drawn by all the horses and mules in the United States. It would fill a million and a half big Lidgerwood cars, enough to make a string 12,000 miles long. These figures show that the mere getting rid of this surplus material is no mean job. But when you reflect that each yard of this sliding material has rendered doubly difficult the getting out of three yards of other material, the true meaning of the slides will begin to appear. There have been times when 170 trains were going out of the cut one day at the south end, only to be stopped entirely the next day by the Cucaracha slide getting busy. Now there may be a dozen tracks in use in the cut, and 24 hours later half of these will be out of commission. That is what makes the slides such serious things to combat. * * *

The determined character of the slides that beset the canal engineers is strikingly shown by the amount of their material that had to be removed in comparison with the total excavations for each year. Prior to 1910 they presented no serious obstacle, since the canal was not deep enough to create the unbalanced condition necessary for their development. Up to that year the excavations on account of slides were only 7.87 per cent of the total excavations. During 1910, however, they became more active, and 7 weeks out of the 52 would have been required to take care of the 14.83 per cent of all excavations which represented the slide débris taken out. In 1911 there was a still greater activity in slides, and, omitting the extra difficulties they imposed, it required 13 weeks to take out the material they brought into the cut, this material amounting to 26.30 per cent of the excavations for the year. The succeeding year saw the cut going still deeper and the slides growing larger and still more bothersome, so that 34.5 per cent of the excavations of that year were of slide material whose removal required 18 weeks. During the year 1913 the cut approached final grade and the slides set a new record, requiring 46 per cent of the total excavations for the year, which accounts for 24 weeks' work. The present year beginning July 1, 1913, saw only two months required for the final bottom to be reached in the cut, outside of the material brought in by the slides, so that at least 44 weeks of this year are chargeable against the slides.

It is thus that the removal of the material brought into the cut by the slides has delayed the completion of this portion of the work 22 months. In dealing with the nature of these slides Mr. Showalter states that they are of four classes, of which the structural breaks are the most troublesome. He writes:

As the big ditch neared final grade the depth was so great that the downward pressure from the top of the embankment forced the weak rock at the bottom to crumble, and this led to great fissures in the ground back some distance from the edge of the embankment. These would gradually widen and the material would sweep downward and outward and upward into the bottom of the canal, often raising the bottom 10 to 20 feet higher than it was a few hours before.

The great slide on the west bank at Culebra, covering some 75 acres of ground and involving millions of cubic yards of material, is the best example of this kind of slide. Nearly half of all the sliding material on the canal strip was embraced in this great movement. It began in 1907, and during the more than six years of its activity it required the dismantling and removal of half of the village of Culebra to keep out of its way. Now it was the American living quarters that had to go; now it was the big Y. M. C. A. clubhouse, after being shored up repeatedly in the hope of saving it; now it was the penitentiary; and so on.

The other principal type of slide is represented by Cucaracha, a mass of soft earth with no rock reaching down deep enough or holding strong enough to keep it from sliding in, slipping across a smooth surface beneath it. * * *

Cucaracha has been like the poor, a problem always with the canal engineers. Every time they got a little nearer toward the final bottom of the cut, Curaracha would take a fresh slide, sometimes shooting millions of yards of material down the embankment and across the cut with such force that her toe would turn to the opposite bank, some 60 feet or more. She kept this up in season and out, bottling up the south end of the cut, and so preventing the work from going forward that Col. Goethals finally determined to let the water in and to dredge her out. He is now inviting her to do her very worst. He has a dredging fleet ready to take her out as fast as she comes in, and it now looks as if she has slid until she can slide no more.

It is obstacles such as these that have been steadily, stubbornly overcome and that have prevented the completion of the canal long before the date set. Other parts of the article deal with the geological formations to which are due these slides, and a demonstration of the fact that a sea-level canal would have been almost impossible.

"Romance of Pan American Railway Building on the Roof of the World" is the somewhat extended title of one of the most interesting of the series of articles by Charles M. Pepper now running in the Sunday Star of Washington, D. C. In this contribution, which appeared in the issue of February 8, 1914, Mr. Pepper deals entertainingly with recent progress in Bolivian railway building, especially of the lines which are expected to form links in the Pan American chain, and catches the reader's attention by the following introduction:

Railway building on the roof of the world has its romance as well as its rugged reality. Bolivia is completing the links in the Pan American system which will make it possible to take a through rail journey with ferriage across Lake Titicaca from Buenos Aires on the Atlantic to Cuzco, the ancient Inca capital in Peru, or on down from Lake Titicaca to the Pacific at Mollendo.

Here in southern Bolivia, in the heart of the great cordillera, known as the Royal Andes, one appreciates what this railway construction means. It is slow enough as railway construction goes in other parts of the world. Much of it is by fits and starts, with long delays between filling the gaps, yet from time to time a link is completed and the dreamers begin to see their dreams take the form of the locomotive, while the Governments of the different countries know that the national necessities and the national ambitions wrapped up in these railway projects are nearing realization.

These reflections were inspired, Mr. Pepper tells us, when, upon the occasion of his recent visit to Bolivia, he noted the presence of a great English railway contractor who was making a survey of the

field with the view of making tenders to the Government for the construction of the Tupiza to Quiaca line. By the time that this short line of only about 50 miles will have been completed it is expected that Tupiza will be linked with the rest of the Bolivian railway system by the completion of the line now being built from Uyuni, which lacks only about 60 miles of reaching Tupiza. Then the railway trip above mentioned will be possible through some of the grandest mountain scenery in the world, and southern Bolivia will have commercial outlet both to the Atlantic and to the Pacific.

Among other railway improvements noted by Mr. Pepper are the following:

In the work that has been done during the last decade the historical silver-mining region of Potosi at last has secured its railway. This is by means of a branch from the main trunk or Pan American backbone that crosses the table-land. The opinion of mining engineers has been that when railway communication was opened with Potosi and the llamas and burros were supplemented as freight carriers by the steam engine there would be a revival of Potosi's riches through the working of the old silver deposits. Evidences of this prospect are now becoming manifest.

The plans of 10 years ago also contemplated reaching the agricultural sections of which the town of Cochabamba is the center. This was to be done by means of a branch line from the main stem at Oruro. Progress has been made with this project, but some time will be required for its completion. * * *

Bolivia's access to the Pacific has been enlarged by the completion of the railway from La Paz to Arica on the coast. This line was built by the Chilean Government through an arrangement with Bolivia. It shortens the route from the central table-land to the Pacific and will have advantages both as a freight and passenger carrier.

The Farquhar syndicate, which controls the valuable Antofagasta & Bolivia Railway that comes up from the coast to Oruro, a distance of nearly 600 miles, has obtained concessions for various new lines. These are part of the grand project of unifying the railway systems of South America which was conceived by Mr. Farquhar.

One line is to be from La Paz to a point on the Beni River; another from Santa Cruz, which is in the heart of the tropical region, to the River Paraguay; and a third from Potosi to Sucre, with a further extension from Sucre down into the tropical regions.

All the Farquhar concessions are based on confidence in the capability of the river basins for colonization. They assume that there are vast agricultural regions which only need people and means of transportation in order to insure cultivation.

What the possibilities of the river basin regions of Bolivia really are no one yet knows, but with railways supplementing the navigable waterways the dream of a large population filling these regions does not seem entirely baseless. To the imagination their possibilities are perhaps most apparent when viewed from the mountain heights. On a few days in the whole year, usually in August, it is possible from the eastern slope of the great Illimani to look down and see the sources of four great river systems. Some lead to the Atlantic through the Amazon and others through the Rio de la Plata. A young American railway engineer told me he saw the four rivers one afternoon each like a silver thread far away, but each with its winding course as clear and distinct as if at his feet. He thereupon became an enthusiast on the future that this great South American interior holds for civilization.

Bolivia is prosperous and the railways have much to do with the prosperity.

Sao Paulo: An Old City that is Carving New Ways, in the Outlook for January 31, 1914, is the fifth of Col. Roosevelt's series of articles

now running in that publication which deal with his travels in South America. "In Southern Brazil" and "In Southernmost Brazil" follow in the February 7 and February 14 issues, respectively.

In writing of Sao Paulo's recent growth and development Col. Roosevelt touches briefly on its early history during Brazil's colonial period and the peculiar part it played. The present city and its environment are thus interestingly dealt with:

Some three centuries went by before there was any vital change. Then, with the cultivation of coffee on a large scale by modern methods, the city and the Province suddenly found themselves swept into the current of industrial and civilized progress. There has been a large immigration. Not only tens of thousands of good workers but hundreds of capable and energetic business men and engineers have come. The native population has responded eagerly to the stimulus, and industrial and material development have been the order of the day. The old life has been pushed aside, but not destroyed, and as yet not completely absorbed. There has been a great development of railways, a great development of tramways in the towns. Automobiles are plentiful. The school system is being spread rapidly. There is a capital normal school at Sao Paulo itself. Moreover, Sao Paulo is an unusually attractive and well-built city, and the smaller towns also are responding to the new thrill. The whole life of the Province has been profoundly affected for good. Yet enough of the old life remains to add color and charm and the pleasure of vivid contrasts. On broad roads with automobiles passing and repassing we also meet great carts precisely such as have been used in this land for four centuries. * * * The pack animals still swarm in the streets of Sao Paulo, and in the outlying districts one comes across mounted pig drovers, their big dogs herding the scores of wild-looking swine. All this goes side by side with bacteriological institutes, with improved stock farms, with light and power plants, with modern methods of education for both boys and girls.

From Sao Paulo the journey was continued southward to the Uruguayan frontier by train on the Brazil Railway, a stop being made at Morungava in the State of Parana to enable the party to take a 20-mile horseback ride to visit the great ranch of the Brazil Land, Cattle & Packing Co. In commenting on this rich section of Brazil the distinguished author writes:

Portions of temperate Brazil are open prairie, portions are forest. The climate is never very hot, nor is there ever severe cold. The colonists with whom I conversed had not found the insects specially troublesome; not much more, and in places rather less, troublesome than in Louisiana and Texas. The general effect in the forest country, while of course the species of plants are entirely different, reminds the observer of the Louisiana and Mississippi canebrake lands and the country along the Nueces. The activities of the settlers in the open country are substantially those with which I was familiar 30 years ago in the cattle country of the West. In the forests one is reminded more of early days on the Ohio, the Yazoo, and the Red River of the South. Certainly this is a country with a wonderful future. It offers fine opportunities for settlers who desire with the labor of their own hands to make homes for themselves and their children, and there are good openings for business men of the right type.

Col. Roosevelt's closing paragraphs in his seventh article anent certain foolish "scares" which seem to be started periodically, probably with insincere political motives, and which seem to be

given more or less credence by unthinking people in Brazil, are well worth quoting. He writes:

There are certain rumors, occasionally taken seriously, which really it hardly seems that it ought to be necessary to contradict. One of these rumors that I encountered more than once in Brazil was that the United States intended to protect the States around the Amazon in setting up a separate republic by themselves, while Germany was to be allowed to take the Rio Grande do Sul as an offset. It was at first difficult for me to make up my mind to answer such a question seriously; but I finally assured my questioners that I did not believe that in the entire 100 million people of the United States there could be found one individual so foolish as to back up such a proposition. The Germans, the Americans, and all other colonists who come to Brazil bring up children who are Brazilians, and not citizens of their fathers' country. The United States could no more "protect" the Amazon countries against Brazil, and Germany could no more take and keep Rio Grande do Sul, than either of them could take and keep one of the Australian States or the Transvaal—or any other State wholly impossible of attack. I added that I was certain I expressed the unanimous feeling of my countrymen when I said that our most earnest and cordial wish was that Brazil should remain united and undisturbed by any revolution or separatist outbreak; that I believed that such would be the case; and that, if such was the case, that this united Brazil had before her during the twentieth century a career of progress and prosperity which very few other nations during that century could hope to parallel.

In temperate Brazil there is already a considerable settlement. The national type of the country has been definitely determined. There is no opportunity for any foreign power to take any of the land. But there is room for an enormous number of new immigrants. It can not be too often repeated, however, that the immigrants who do best in this new country, as in all other new countries, are the farmers, the mechanics, the men prepared to work hard with their hands, and who are not afraid to live hard for a year or two. The Brazilian Government and its agents and representatives are desirous to do all they can for the immigrants. But the dislocation of home ties when men leave one country and settle in another is such that some hardship is inevitable, and in many cases there is very much hardship. Even where the great majority do well, there are certain to be some who suffer deservedly and others who suffer undeservedly. All these things should be taken into account by intending immigrants. Nevertheless, I feel that there are many millions of industrious and honest people in the Old World to whom it would be the greatest possible piece of good fortune to cast in their lot with twentieth-century Brazil.

The Blind in the American Museum, by Agnes Laidlaw Vaughn, in the January (1914) issue of the American Museum Journal, is an account of the methods pursued by the officials of the American Museum of Natural History, of New York, in the entertainment and instruction of the blind, both children and adults, of the city. This commendable philanthropic work has been developed into a systematic plan and is proving a boon to these unfortunates. The following excerpts from the article will give an idea as to the plan adopted:

The work with the blind in the American Museum began in 1909. Several members of the museum staff had given lectures on natural history to clubs and gatherings of blind people and had been granted permission to use some of the museum material for illustration. The experience was so interesting that it suggested to Dr. Hermon C. Bumpus, then the director of the museum, the possibility of special work for the

blind in the museum, and the trustees authorized the preparation of a room to contain collections of interest to blind visitors.

This special exhibit was subsequently abandoned, however, and arrangements were made whereby instructors could meet blind visitors and show them specimens in the exhibition halls. In many instances the specimens were taken out of the cases for examination, and where this was not possible the visitors were taken to the storage study collections.

During the first year the work with the blind was experimental and more or less spasmodic. In 1910, however, its development and extension were made possible through the bequest of Phebe Anna Thorne, and gifts in her name by her brothers, Jonathan and Samuel Thorne. This generous endowment provides a fixed income which enables the museum to supply transportation for the blind and their guides to and from the museum; to send loan collections to schools in the vicinity of New York; and to give illustrated lectures in the museum to school children and to the adult blind.

The subjects of these lectures have included several on natural history and ethnology. One on ancient Peru consisted partly of readings from Prescott's "Peru." The audience was deeply interested to learn that Prescott was blind when he wrote this famous book. Among the objects illustrating this lecture were some fine examples of Peruvian pottery. These were later reproduced in clay by one of the blind girls. A talk on the songs of North American Indians was illustrated by unique phonograph records taken among the Dakota, Blackfoot, and other tribes, and by musical instruments and other related objects. * * *

Two or three evening lectures will be given by notable persons, by explorers and scientists. Admiral Peary has consented to be the first speaker. The audience will pass from his lecture to an examination of relief charts, of the sledge that reached the North Pole, of fur clothing, Eskimo implements, and arctic animals, including the Peary caribou, the most northern of the deer family. The afternoon lectures, of a more informal character, will describe the Panama Canal, life and work among primitive people, and how animals care for their young. The blind children in the public schools have been coming to the museum for informal talks on natural history and other subjects, such as stories told to Indian and Eskimo children; man and his tools—from the river pebble to machinery. * * *

For the blind children the visits to the museum will be recognized from now on as part of their school work and will be made during school hours. There are more than 100 blind children in the elementary schools, too many to deal with satisfactorily at one time. One half of the classes will come to the museum on the second Tuesday and the other half on the fourth Tuesday of the month. The same lecture will be repeated, and will be given a third time to classes from near-by cities.

In addition to natural-history specimens and ethnographical material lent to the schools, we have prepared several small models of large mammals. * * *. The child forms a better conception of the animal as a whole, and of the proportion of its parts from the model which he can hold in his hands. His adjustment to the conception of size may be trained, as is that of the sighted child when regarding maps, pictures, or toys. The danger, however, of the first impression fixing an erroneous conception of size and texture is perhaps greater for the blind than for the normal child whose adjustments are more rapid and constant. We propose, therefore, both the life-size mount and the small model. The child shall first feel the actual specimen, shall realize that it is large, hairy, and so forth; then he shall take the model and study the appearance of the animal as a whole, and gain a more definite conception of its proportions. He may then study the mounted animal in detail.

Antigua Guatemala, by Fielding Provost, in the February number of the Pan American Magazine, New Orleans, La., is a delightful description of an old city of Guatemala, its picturesque ruins, its beautiful environment, together with a brief historical sketch in the author's most entertaining style. A bit sentimental, perhaps, but all the more interesting and pleasing, as witness the following:

Standing upon the roof of the cathedral in Antigua Guatemala one looks down upon a sienna-red sea of tiled roofs, between them catching glimpses of charming patios where old stone fountains stand among roses and violets; away in front soars the splendid cone of the Volcan de Agua, his sweeping sides clothed halfway down with thick forest and, where the trees cease, decorated with the climbing milpas of the indefatigable Indian—the Cachiquel, native American of Central America. At one side of Agua his descending slopes meet the rise of another volcanic height, the chain whose sharpest peak is the Volcan de Fuego, whose highest is Acatenango, the “Padre de Volcan,” with a lower cluster of cones known as the Tres Hermanas.

Follow the foothills of these volcanoes with your eyes and you see them bear round the horizon in a series of green waves, until they meet again with the foot of Agua. The whole sunny valley is sheltered by great or small mountains and access to it is through the passes—roads and paths wind in all directions up and beyond the foothills.

Never was any place more lovely. The soft, scented air comes fresh and sweet; there is water and mountain and vale and forest, and here spread out is the old city dreaming, peaceful as the Garden of Eden itself. This is the land of eternal spring, where it is never very hot or cold, and the temperature varies but a few degrees the year round. Flowers are never out of bloom, fruits of one kind or another are always in season, and the swelling sides of the volcanoes are clothed with a perpetual green wrap. Even in the wet season rain falls during only a part of the day, and nature is in her most beautiful phase with a wealth of scented blossom.

In no place could nature do more to make a paradise, and you can not wonder that even the menace of earthquakes could not desolate the valley. It is a strange fact that after the official capital of the country was changed to the present site of Guatemala City in 1776 no more earth tremors of great destructive force were experienced, and to-day, although it is common enough to feel slight tremblings, no damage is done and there is no alarm. * * *

Do not make the mistake of thinking of Antigua as a depopulated place, however; it was never without many thousands of people who either for love of the place, or because all they possessed was here, stayed and brought up their children and their grandchildren below the shadow of the volcanos. There is many an old Spanish name in Antigua, whose bearers count their ancestors back to the time of the conquest, to the glorious days of Alvarado and his caballeros; there is many a splendid old house, with old carved wooden pillars, with magnificent doors, inches thick, studded with medieval bronze bosses, with patios where fountains play into basins of worked stone; there is many a fine piece of old colonial furniture, and there is many and many a tale of old times to be unearthed by anyone who loves old tales. For me the swordgirt ghosts of Puertocarrero; the delicate face of Doña Leonor, daughter of Alvarado by a Tlascalan princess; the cassocked specter of that kindly priest, the Padre de las Casas; and the genial face of the old soldier-historian, Bernal Diaz, haunt the stone-paved streets. They too looked up at the noble heights of Agua and Fuego and saw the dazzling sheets of color that flood the sky morning and evening in that radiant atmosphere. They saw more than I, indeed, for at that time Fuego was still in constant eruption and a stream of sullen smoke, changed at night to a glow of threatening red light, was always to be seen hovering at the top of the peak.

The descriptions of the ruins of many of the old churches are equally admirable and interesting, while the early history of the country during the period of the Spanish conquistadores is treated in an appreciative and sympathetic manner. After finishing the story the reader will undoubtedly agree with Mr. Provost when he says:

A month or more can well be spent in roaming about Antigua, dreaming of old tales, and disturbing for one's own satisfaction old bones of history. You think of the first and second cities, both overcome in their state by the hostility of the mountains, and looking upward to those lovely sovereign cones, towering into a sky of transparent purity, you feel that one could here well afford to make peace with those ancient outraged gods and so end in this sweet vale the autumn of earthly days.

A Chimpanzee's Vocabulary, by George Gladden, in *The Outlook* for February 7, 1914, is an interesting article dealing with the powers of speech of animals in general and of the anthropoid apes in particular. So much has recently been published anent the so-called "language" of animals that it is well to note the opinions of naturalists who have had unusual opportunities to study the matter from a scientific standpoint. Mr. Gladden is assisting Mr. Hornaday of the New York Zoological Park in wild-life protection work, and writes from personal knowledge and observation.

After a preliminary reference to the work of Mr. Richard L. Garner, who carried out a scheme for living in a steel cage among wild animals in their native jungles, and but few of whose conclusions have as yet been accepted by responsible naturalists and investigators of animal psychology, Mr. Gladden continues:

My own observations, then, have been entirely in accordance with those of most of these investigators. I can find no proof that any of the animals below man have what may be correctly called a "language"—that is, any power of intentional and articulate speech. Many of the mammals and birds have certain cries (often accompanied by characteristic movements) by means of which they express various emotions, such as fear, anger, joy, sorrow, love, curiosity, and so on. And now and again an animal may convey vocally a concrete idea. For example, Mr. John Burroughs says that a certain tone in his dog's bark means that he has found a snake; and I myself have noted a peculiar alarm call of the robin which, in every one of the many instances I have investigated, has meant a cat. Again, if you imitate the cry of a red-shouldered or red-tailed hawk within the hearing of a rooster, he will sound a certain characteristic alarm note, from which apparently the hens get the definite idea of a hawk. Such sounds as these, I believe, are the nearest approximation to speech that the animals are capable of using. * * *

On the other hand, we have definite proof of the capacity of certain animals for grasping the meaning of spoken words, and of associating such words with the objects which they denote.

It is with this phase of the question that Mr. Gladden deals in his article, and he cites as examples the evident comprehension of the

meaning of spoken words by dogs, horses, etc., and especially by the apes. In this connection he writes:

It seems probable, however, that the anthropoid apes, and especially the chimpanzees and the orang-utans, have greater capacity for acquiring this kind of subjective vocabulary than is possessed by any of the other animals. This is a matter which I have been enabled during the past year to study with some care, thanks to the opportunities I have had to become acquainted with all of the remarkable group of nine anthropoids (four of chimpanzees and five orangs) which are included in the great collection of the New York Zoological Park. * * *

The most intelligent ape in the Zoological Park group, and beyond a doubt one of the most sagacious simians of which we have any reliable records, is Susie, the little 3-year-old chimpanzee. Susie was obtained by Mr. Garner in the Fernan Vas district of the French Congo region, about 125 miles inland from Cape Lopez.

Mr. Garner studied Susie for several months before he disposed of her to the New York Zoological Society, and he recorded his belief that she spoke "in her own language" five words—"yes," "no," "want," "protest," and "satisfaction" or "contempt." Mr. Ferdinand Engeholm, who has had charge of the Primates' House in the Zoological Park for four years, tells me, however, that he has never been able to satisfy himself that either Susie or any other of the apes or monkeys ever makes deliberate use of any identifiable sound to express a concrete idea.

It seems, however, that although Mr. Engeholm has not been able to discover that his apes use any language, correctly speaking, he is confident that the chimpanzees comprehend the definite meaning of many words and that their minds react promptly when these words are addressed to them in the form of commands. In this connection Mr. Gladden gives a list of 43 commands, consisting of 81 words, which the chimpanzee, Susie, seemed plainly to understand and to distinguish from one another. Further experiment with this remarkable animal would doubtless have resulted in obtaining many other interesting facts, but the intelligent little creature died on January 22, 1914, much to the regret of her many human friends.

Meat Production in Swamps is the title of an interesting article in the January (1914) issue of the *Journal of Heredity*, the official organ of the American Genetic Association, Washington, D. C. The experiment of increasing the food supply of the country as outlined by the writer, who is the editor of the magazine, is well worth considering by agricultural experts and others who are endeavoring to ameliorate the conditions brought about by the constantly increasing price of meat products. The possibilities of the experiment suggested may be seen from the following excerpts:

While most of the work of plant and animal breeders has, in the last analysis, the production of cheaper food by increasing the supply as its object, there is one opportunity in the United States which has been entirely neglected. This lies in the large areas of swamp land in the Southern States which at present are economically almost worthless and which can not be reclaimed to ordinary agriculture except at great cost. If this land could be made directly useful in the production of meat, it would appear to be a desirable enterprise from every point of view.

Such a possibility was clearly outlined by the late W. N. Irwin, before members of the American Breeders' Association several years ago, in a discussion of possible increase of meat production in the United States by the introduction of mammals not now found in this country. He remarked:

In selecting other species for introduction it is very important that we consider the food supply that they will require. We have several large areas well adapted to certain kinds of animal life and not now producing, for the reason that the animals are not there. The area of greatest promise is our Gulf States and consists of over 10,000 square miles (6,400,000 acres) of water and marsh surface, with a sufficient quantity of marsh grass, water hyacinths, and other aquatic plants now growing to support thousands of animals adapted to those conditions. If properly seeded to water hyacinths and other aquatic plants, this vast region would be capable of producing a million tons of meat per annum, worth \$100,000,000. This area should be stocked with hippopotamus (*Hippopotamus amphibius*), the flesh of which is highly esteemed, and when salted and cured is known in the Cape of Good Hope as zee-kce speck (lake-cow bacon). The fatty mass lying between the skin and the flesh or muscles is considered one of the purest of animal fats and is in great demand among the cape colonists.

Mr. Irwin's suggestion was found to be impracticable, owing to the great size and the impossibility of controlling these hippopotami, but the editor of *Heredity* suggests the substitution of the pigmy hippopotamus of Liberia as the subject of the experiment. The following description of the three specimens of this animal which are now in the New York Zoological Park would indicate that they could probably be as easily handled as are swine:

The adult male, supposed to be 10 years old, is 30 inches high at the shoulders, 70 inches in length from end of nose to base of tail, with a tail 12 inches long. His weight is about 420 pounds. The female is believed to be only 3 years old, and when received (1912) stood 18 inches high at the shoulders and weighed 176 pounds.

The animal is said to make its home in swamps and wet forests, often at a distance of several miles from the nearest river or lake, and that it is not at all dependent upon large bodies of water, as its colossal relative always seems to be. It is said to subsist on fleshy and tender plants and reeds, and grass that is not too coarse and tough to be masticated. As to their hardiness in the open air in the Gulf States during winter, there is no evidence, but it need not be presumed that because they come from a tropical country, they could not adapt themselves to the Southern United States. Many of the domestic animals in the Temperate Zone are of strictly tropical origin.

At present the cost of breeding the animals is prohibitive, the New York Zoological Society having paid \$12,000 for three, but if this difficulty is overcome animal breeders will have an opportunity to try an experiment that will be as certainly interesting as it will be probably important.

Through the Great South Woods of Mexico, by Thos. Fitzhugh Lee, in the February number of *Outdoor World and Recreation*, might be

appropriately termed a visit to the land of mahogany. It is a well-written and highly entertaining story of the writer's trip through forests where the mahogany and other precious woods abound and from which our markets are receiving large quantities of logs. We are told of the great mahogany or caoba tree that stands sentinel-like in the forest primeval; of the ox teams that work all night that the intense heat of the day may be avoided; of the 1,000 men employed on one large estate; and of the song of the laborers with lights on their heads wending their way before the dawn to the general rendezvous. "Just before the coming of the rains in June," says the writer, "certain of the old workmen of the place, provided with rice, a rifle, and a machete, leave for the woods to 'spy out' the trees for the season's cut. * * * Here they climb the tallest tree, pick out the mahogany trees of the surrounding woods, then, with the unerring sense of the woodsman, cut their way straight to them through the dense growth."

The work of hauling out the logs is described as being picturesque, the lights on the heads of the workmen resembling great fireflies, while the strange expletives and the cracking of many whips mark the first stage of the trip of the mahogany log from its forest home. After the numerous teams arrive at the Candelaria River the logs are lashed together into rafts, each one containing several hundred logs, and then the river flotilla begins its voyage to the shipping center from which point the wood is loaded aboard ships for Europe and the United States.

Buenos Aires and Some Minor Argentine Ports, by F. Lavis, in the Engineering News (New York) for January 29, is a most timely article in which the harbor facilities of Buenos Aires, Rosario, Bahia Blanca, and Santa Fe are described. Some details of the port works of the first-named city are given, showing the completed sections as well as those under construction. The article covers eight pages, and, with an equal number of illustrations, and several detail maps, indicates a marked degree of progress that Argentina is showing in providing greater facilities for handling the country's increasing exports and imports. The writer also takes up the important question of the three gauges of Argentina's railways, which considerably complicate shipping. The ports of Buenos Aires and Bahia Blanca are served by broad-gauge lines only, while those of La Plata, Rosario, and Santa Fe have the two gauges. With the advent of the standard gauge at Buenos Aires there are now lines of all three gauges reaching the city, but unfortunately the third is not yet built to the river front; however, the increasing trade will doubtless demand the laying of a third rail, which has been done in numerous other places in the country.

Thirty Years in Argentina is the subject of the leading article in the South American (New York) for February 1. The facts are based on an interview given by Mr. E. T. Phillips, a North American, who has been living in Buenos Aires for 30 years, and who very naturally has become closely identified with the development of the country of his adoption. The story of progress which Mr. Phillips tells is most entertaining. He began life in Argentina by selling windmills, and from the three he placed the first year his sales have increased enormously, and to-day the traveler sees a landscape studded with them in all directions. He talks of the leading questions in which Argentina is interested and foresees a wonderful future and the "development of a world power."

Boy Scouts in Paraguay is the subject under which the English journal "Paraguay," published at Asuncion, tells of the organization of the youths of the capital city. Many of the leading citizens assembled in the city of Asuncion in November last and effected an organization, after which a large number of boys enrolled their names and took up the work under the various instructors. The Boy Scout movement had a most auspicious beginning, and it is believed that in Paraguay, as in many other lands, its extension and development means much to the youth of the country.

Commerce and Industries of Panama, by Edward Neville Vose, in Dun's International Review, February number, is a profusely illustrated article dealing with the commercial development and future possibilities of the Republic of Panama and also of other sections of Central America.

Patagonian Channels, in the January 10 issue of Shipping Illustrated (New York), is a descriptive article with a half-page picture showing the entrance to a small body of water called Last Hope Inlet. The article, although short, tells of the life of the natives of Tierra del Fuego; and of the picturesqueness of the surrounding islands and mountains the writer says "it is here that men from the bridge to the forecastle silently commune with nature, which fascinates with the power of its desolate beauty."

Paraguay and Her Progress is the subject of a well-illustrated article appearing in the Spanish edition of Dun's International Review for January. The various phases of the country's progress are considered, while the statistics shown indicate notable advances made during recent years.

The Panama Canal and the Lumber Trade, by R. C. Bryant, in the February issue of American Forestry, is an interesting article showing a deep study and insight into this industry. The writer is professor

of lumbering at Yale University, and his investigations have covered a wide field. He says that the seven States tributary to New York and Philadelphia consume about 6,000,000,000 feet of lumber in excess of production, and shows that lumber of the Western States may reach the Atlantic seaboard via Panama in larger quantities and at cheaper rates. Many other sections are considered, and numerous illustrations add to the interest and timeliness of the article.

New Light on Iron Ore Reserves of the World, by Edwin C. Eckel, in the Iron Trade Review for January 15 (Cleveland), relates some of the results of exploration and development and thereby facilitates more accurate estimates of possibilities. North and South America and Europe are figured as having about 35 billion tons of ore, or 16 billion tons of metallic iron, and all of this is of commercial grade.

Gold and Silver Production in 1913, by Frederick Hobart, in the January 10 issue of the Engineering and Mining Journal (New York), is a statistical article showing the world production as well as that of the various countries and States. The total output of the world in 1913 shows a decrease of about 2.3 per cent from that of the previous year.

SUBJECT MATTER OF CONSULAR REPORTS

REPORTS RECEIVED UP TO MARCH 1, 1914.¹

Title.	Date.	Author.
ARGENTINA.		
Volume II of Statistics Annual, 1911.....	1913. Nov. 20	R. M. Bartleman, consul general, Buenos Aires.
CHILE.		
Amount of foreign coal consumed yearly in Chile.....	1914. Jan. 12	Alfred A. Winslow, consul, Valparaiso.
Ready-made clothing (men's and boys'), little market, duty on same.	Jan. 20	Do.
Imports of saddles for years 1910, 1911, and 1912.....	do....	Do.
COLOMBIA.		
Municipal taxes in Barranquilla.....	Jan. 22	Isaac A. Manning, consul, Barranquilla.
CUBA.		
Printers' tools.....	Jan. 31	R. E. Holaday, consul, Santiago.
Manicure implements, scissors, shears, etc.....	Feb. 2	Do.
Commerce and industries in 1913—Exports to the United States.....	Feb. 6	J. L. Rodgers, consul general, Habana.

¹ This does not represent a complete list of the reports made by the consular officers in Latin America, but merely those that are supplied by the Pan American Union as likely to be of service to this organization.

Reports received up to March 1, 1914—Continued.

Title.	Date.	Author.
DOMINICAN REPUBLIC.		
No new maps or census reports, last census, 1819.....	1914. Jan. 15	Charles H. Albrecht, vice and deputy consul general, Santo Domingo.
Telephones.....	Jan. 29	Do.
Sugar crop.....	do.....	Do.
Commercial and industrial organizations.....	do.....	William Walker Smith, consul general, Santo Domingo.
ECUADOR.		
Exports of hides from Ecuador in 1913.....	Jan. 20	Frederic W. Goding, consul general, Guayaquil.
Production of cocoa beans in 1912-13.....	Jan. 21	Do.
GUATEMALA.		
Report on chocolate, cacao, candies, and confectionery.....	Feb. 4	William Owen, vice and dep- uty consul general, Guate- mala City.
MEXICO.		
Report on vehicles.....	1913. Dec. 23	John R. Silliman, vice consul, Saltillo.
Chocolate, cacao, confectionery.....	1914. Jan. 16	William B. Davis, vice con- sul, Guadalajara.
Heavy agricultural machinery, no market.....	Jan. 24	Richard M. Stadden, vice consul, Manzanillo.
Report on "Zapupe" by W. B. Cox.....	Jan. 26	Clarence A. Miller, consul, Tampico.
Report on vehicles.....	do.....	William B. Davis, vice con- sul, Manzanillo.
Lightning.....	Feb. 2	Wilbert L. Bonney, consul, San Luis Potosi.
PANAMA.		
Copy of translation of public registration, decree.....	Jan. 11	Alban G. Snyder, consul gen- eral, Panama.
Milk.....	Feb. 4	James C. Kellogg, consul, Colon.
Cotton in Panama.....	Feb. 7	Alban G. Snyder, consul gen- eral, Panama.
PERU.		
Report on the finances of Peru for third quarter of 1913.....	1913. Dec. 10	Luther K. Zabriskie, vice consul, Callao.
Rubber exportations from the Amazon River district of Peru during October, 1913.....	1914. Jan. 7	Do.
Peruvian copper production in 1913.....	Jan. 13	Do.
VENEZUELA.		
Duty on graphite, lubricating greases, mixed paints, linseed oil, etc.....	Jan. 14	Thos. W. Voetter, consul, La Guaira.
Automobiles in Caracas, import duty.....	do.....	Do.
Machinery for cutting veneers, no market.....	Jan. 17	Do.
Commercial notes: New parcel-post service with Germany— Closing of the Imataca iron mines—Development of magnesite mines—Water power at Naiguata—Coffee and cacao crop—De- struction of locusts.	Jan. 20	Do.
Tools for removing the cacao pods.....	Jan. 22	Do.



COMMERCE OF HONDURAS FOR 1912 :: :: ::

THE total foreign trade of Honduras for the fiscal year ending July 31, 1912, according to the report of the minister of the treasury and public credit made January 4, 1913, amounted to 18,493,731.42 pesos silver, of which 10,793,285.62 pesos were imports, and 7,700,445.80 pesos exports.

Estimating the gold premium at 150 (i. e., 2.50 pesos silver equal \$1 gold), the imports expressed in gold would be \$4,317,314, and the exports \$3,080,178; total, \$7,397,492. For the preceding year the figures were: Imports, \$3,560,939; exports, \$3,024,726; total, \$6,585,665.

IMPORTS.

The imports by countries for the last four years were as follows:

Country.	1908-9	1909-10	1910-11	1911-12
United States.....	\$1,769,877	\$1,838,877	\$2,524,133	\$2,891,838
United Kingdom.....	348,510	378,645	500,029	546,473
Germany.....	233,513	253,919	300,685	487,969
France.....	114,891	90,823	97,771	190,382
Central America.....	51,220	60,400	52,310	69,426
British Honduras.....				37,535
Spain.....	30,781	16,792	28,987	30,343
Belgium.....	6,981	15,624	12,661	22,566
Italy.....	13,566	10,115	16,704	21,614
Japan.....	563	3,279	8,098	7,071
Mexico.....	3,250	8,864	13,054	6,422
Other countries.....	8,399	18,569	8,507	5,675
Total.....	2,581,553	2,695,907	3,560,939	4,317,314

NOTE.—Gold premium averaged as follows: 1908-9, 165; 1909-10, 180; 1910-11, 160; 1911-12, 150.

Of the imports for 1911-12, goods to the value of \$3,243,714.37 were dutiable. There were exempt from duty goods amounting to \$1,073,599.88.

There is no official publication as yet of the imports by articles for the fiscal year 1911-12. The following statement of this detail is taken from the "Revista Económica" Tegucigalpa.

Provisions.....	\$461,262	Notions.....	\$26,634
Cotton manufactures.....	437,915	Wire.....	25,689
Unbleached muslin.....	289,974	Blankets.....	24,841
Postage stamps.....	264,928	Wool.....	24,364
Drills.....	188,391	Dynamite.....	24,072
Iron and manufactures of.....	187,163	Electrical supplies.....	23,746
Prints.....	173,074	Leather goods.....	23,429
Chemicals.....	127,856	Laces.....	21,247
Timber.....	99,961	Hats.....	20,463
Shoes.....	93,367	Coal.....	19,066
Agricultural implements.....	80,880	Furniture, wooden.....	18,583
Silver coin.....	58,440	Candles.....	18,067
Wines, spirits, beer, etc.....	57,490	Hose.....	17,186
Arms.....	51,261	Soap.....	16,932
Paper.....	37,377	Carts.....	16,801
Oils.....	30,052	Steel cutlery.....	16,558

Kerosene.....	\$16,008	Cordage, etc.....	\$8,317
Confectionery.....	15,978	Tobacco.....	7,626
Chinaware.....	14,561	Tallow.....	6,735
Matches.....	14,288	Rubber goods.....	5,897
Cement.....	13,056	Spices.....	5,834
Musical instruments.....	12,058	Lamps.....	4,885
Silk and manufactures of.....	11,785	Linen.....	3,969
Perfumery.....	11,707	Toys.....	3,749
Tar.....	10,348	Animals.....	3,370
Varnish, etc.....	9,291	Mineral waters.....	2,761
Oilcloth.....	8,678	Copper goods.....	1,991
Skins, tanned.....	8,425		

The imports by ports of entry for the years 1911 and 1912 were as follows:

Ports.	1910-11	1911-12
Amapala.....	\$1,251,560	\$1,656,245
Puerto Cortes.....	1,435,662	1,475,001
La Ceiba.....	707,610	1,022,716
Trujillo.....	114,467	89,254
Roatan.....	51,640	74,098
Total.....	3,560,939	4,317,314

EXPORTS.

The exports by countries for the last four years were as follows:

Countries.	1908-9	1909-10	1910-11	1911-12
	<i>Pesos silver.</i>	<i>Pesos silver.</i>	<i>Pesos silver.</i>	<i>Pesos silver.</i>
United States.....	4,861,599	5,637,528	6,732,567	6,805,023
Central America.....	87,957	241,235	430,742	331,482
Germany.....	190,250	399,752	268,991	321,890
United Kingdom.....	125,553	125,208	108,796	177,568
Peru ¹				50,060
France.....	3,783	8,195	7,220	4,542
Mexico.....		2,550	1,500	3,420
Other countries.....	5,952	15,320	12,000	6,400
Total.....	5,275,094	6,429,790	7,561,816	7,700,445

¹ In 1908-9, 1909-10, 1910-11, included under "Other countries."

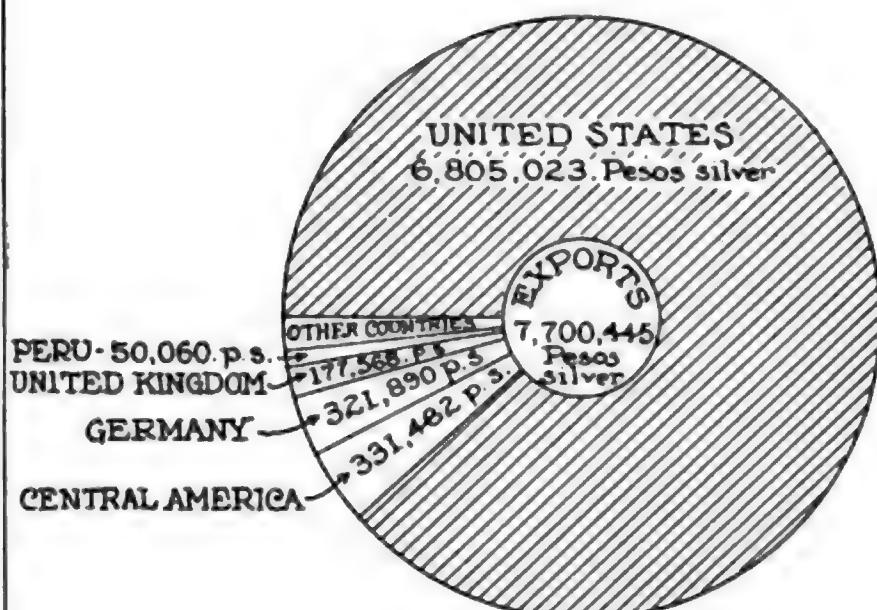
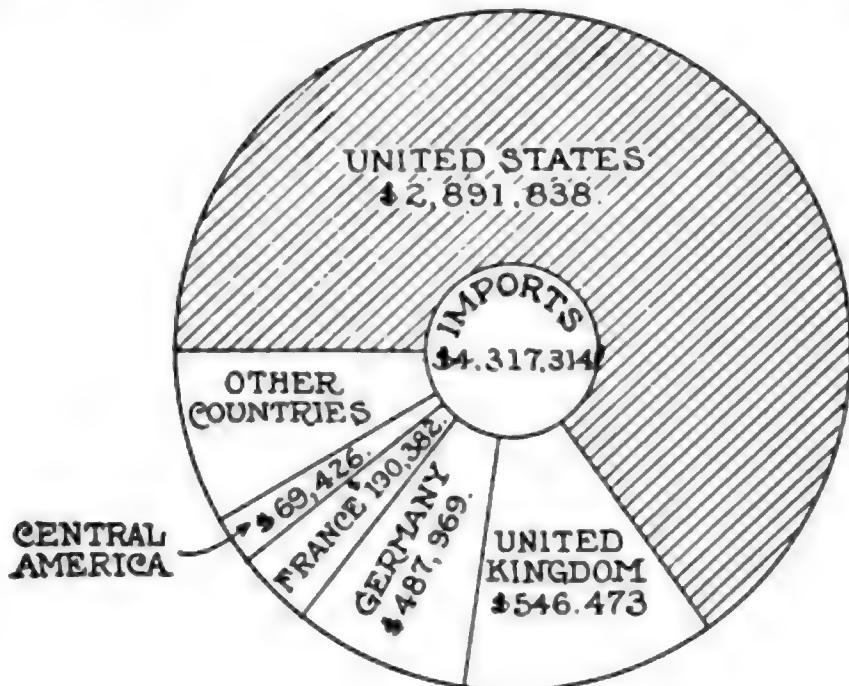
The exports by articles for the year 1911-12 were as follows:

	Pesos silver.	Pesos silver.	
Gold ore.....	49,939.44	Sarsaparilla.....	40,142.43
Gold and silver cyanides...	2,049,527.83	Bananas.....	3,473,765.73
Gold and silver ore.....	20,823.85	Coffee.....	205,522.45
Silver ore.....	14,696.25	Coconuts.....	485,535.85
Silver, coined.....	323,595.00	Leaf tobacco.....	50,060.00
Mineral residuum.....	16,201.00	Woods:	
Skins:			
Alligator.....	2,751.43	Mahogany.....	17,821.00
Deerskins.....	53,927.41	Other woods.....	8,501.32
Other skins.....	825.10	Rubber.....	159,473.08
Hides.....	267,677.94	Reexported merchandise..	4,405.00
Cattle.....	415,199.00	Miscellaneous.....	18,534.69
Mules.....	21,520.00	Total.....	7,700,445.80

HONDURAS COMMERCE - 1912

IMPORTS \$7,397,492.
 \$4,317,314.

EXPORTS \$3,080,178



(2.50 PESOS SILVER
 = 1.00 U.S. GOLD)

PAN AMERICAN UNION

COMMERCE OF NICARAGUA FOR 1912 :: :: ::

THE total foreign trade of Nicaragua for the year 1912, according to the report of the collector general of Nicaraguan customs, amounted to \$8,828,336, of which \$4,966,820 represented imports and \$3,861,516 exports.

In 1911, according to the same report, the imports were \$5,724,695 and the exports \$6,579,414, or a total of \$12,304,109. The decrease for the year was, therefore, imports, \$757,875; exports, \$2,717,898; total, \$3,475,773.

IMPORTS.

The imports by countries for the years 1909, 1910, 1911, and 1912 were as follows:

Country.	1909	1910	1911	1912
United States.....	\$1,341,692	\$1,581,457	\$2,754,940	\$2,549,026
United Kingdom.....	625,668	664,232	1,412,296	939,290
Germany.....	286,408	358,520	642,753	604,038
France.....	131,826	156,645	448,264	256,255
Italy.....	108,307	68,834	217,176	121,610
China.....			46,102	130,292
Salvador.....	7,820	5,450	9,127	77,340
Spain.....	28,462	15,247	84,879	58,656
Guatemala.....	330	693	5,610	16,785
Japan.....			14,999	15,569
Honduras.....	3,567	1,457	1,165	3,490
Costa Rica.....	1,626	2,118	4,924	2,659
Countries of Africa.....			17	129
Other countries of America.....	3,235	1,717	19,654	102,914
Other countries of Europe.....	43,316	1,935	63,189	88,767
Total.....	2,583,257	2,856,305	5,724,695	4,966,820

Following are the imports by articles for the years 1911 and 1912:

Articles.	1911	1912
Cotton goods.....	\$1,961,128	\$1,259,869
Liquors, beer, wines, and other beverages.....	170,843	227,835
Cement.....	7,805	16,273
Vegetable fibers and manufactures.....	119,092	72,691
Iron and steel manufactures.....	570,497	658,507
Woolen goods.....	159,019	89,746
Paper and manufactures.....	94,970	77,830
Petroleum.....	69,758	45,255
Hides and skins and manufactures.....	225,025	140,556
Food products:		
Rice.....	60,026	239,801
Sugar.....	12,630	29,899
Coffee.....	2,788	19,575
Meat and dairy products.....	99,267	117,193
Fruits and products.....	48,127	23,458
Flour.....	314,430	469,325
Vegetables and products.....	43,021	93,538
Indian corn.....	547	57,965
Fish and fish products.....	39,877	37,989
All other.....	60,568	32,927
Chemicals, drugs, and medicines.....	306,391	173,125
Silk goods.....	154,218	149,085
All other imports.....	1,204,668	964,378
Total.....	5,724,695	4,996,820

COTTON GOODS.

This heading is subdivided as follows:

Articles.	1911	1912
Cotton piece goods.....	\$1,451,947	\$869,572
Ready-made clothing.....	198,784	201,232
Thread.....	68,865	34,422
All other.....	241,532	154,643
Total.....	1,961,128	1,259,869

The imports by principal countries under the above subheads were:

	1911	1912		1911	1912
Cotton piece goods:			Ready-made clothing—Contd.		
United Kingdom.....	\$669,518	\$509,853	Other European countries.....	\$4,618	\$6,793
United States.....	481,068	223,497	Other American countries.....	875	3,859
Italy.....	85,088	38,839	Thread:		
Germany.....	44,770	37,034	United Kingdom.....	46,038	24,352
France.....	100,113	28,064	Germany.....	5,905	4,961
Spain.....	32,465	18,060	France.....	11,241	2,429
Other European countries.....	5,571	10,825	United States.....	4,857	2,018
Other American countries.....	3,353	3,399	Other European countries.....	735	662
Ready-made clothing:			All other cotton goods:		
Germany.....	62,262	75,822	United Kingdom.....	107,178	53,157
United States.....	68,106	74,686	Germany.....	36,640	38,649
Spain.....	18,815	13,237	United States.....	48,233	21,452
France.....	21,224	13,119	France.....	26,794	13,404
United Kingdom.....	12,384	9,568	Other European countries.....	5,877	10,781
Italy.....	10,416	4,140	Other American countries.....	11	2,211

LIQUORS, BEER, WINES, ETC.

This heading is subdivided as follows:

	Articles.		1911	1912
Malt liquors.....			\$34,667	\$40,846
Mineral waters, natural and artificial.....			7,927	10,173
Distilled spirits (brandy, whisky, cordials, and liqueurs).....			54,279	110,772
Wines.....			65,274	50,989
All other.....			8,096	6,055
Total.....			170,843	227,835

The imports by principal countries under the above subheads were:

	1911	1912		1911	1912
Malt liquors:			Distilled spirits—Continued.		
Germany.....	\$10,843	\$10,761	Germany.....	\$2,486	\$834
United States.....	11,834	9,799	Other American countries.....	40	63,382
United Kingdom.....	4,245	5,075	Other European countries.....	2,390	1,466
Other European countries.....	402	328	Wines:		
Other American countries.....	7,343	14,883	France.....	21,381	21,099
Mineral waters, natural and artificial:			United States.....	18,080	12,182
Germany.....	3,479	6,482	Italy.....	8,750	10,083
France.....	2,465	1,731	Germany.....	6,893	9,358
United States.....	534	1,141	Spain.....	7,470	4,008
United Kingdom.....	1,135	791	United Kingdom.....	2,513	631
Distilled spirits:			Other European countries.....	2,499	
United States.....	22,942	21,612	All other beverages:		
United Kingdom.....	9,881	13,553	United Kingdom.....	8,104	5,214
France.....	16,541	10,925	United States.....	67	722

CEMENT.

The principal countries of import were:

Country.	1911	1912
Germany.....	\$3,661	\$10,877
United States.....	2,715	4,635
Other European countries.....	1,459	762

VEGETABLE FIBERS.

This heading is subdivided as follows:

Articles.	1911	1912
Bags of jute and bagging.....	\$52,624	\$24,876
Linen piece goods.....	26,692	16,587
Other manufactures of linen.....	18,549	12,899
All other vegetable fibers.....	21,227	18,329
Total.....	119,092	72,691

The imports by principal countries under the foregoing subheads were:

	1911	1912		1911	1912
Bags of jute and bagging:			Other manufactures of linen:		
United Kingdom.....	\$20,247	\$16,783	Germany.....	\$2,797	\$3,178
United States.....	4,858	2,761	France.....	4,729	3,039
Germany.....	22,906	3,427	China.....	23	2,885
France.....	4,549	1,057	United Kingdom.....	6,582	1,816
Linen piece goods:			United States.....	2,031	643
United Kingdom.....	5,253	8,523	Other European countries.....	1,782	946
Germany.....	2,182	1,930	All other vegetable fibers:		
United States.....	3,671	1,570	United States.....	13,008	13,848
France.....	2,551	1,544	Germany.....	4,149	1,967
Other European countries.....	3,035	2,990	United Kingdom.....	1,141	1,460
			Other European countries.....	2,055	711

IRON AND STEEL AND MANUFACTURES.

This heading is subdivided as follows:

Articles.	1911	1912
Bars, rods, ingots, castings, and structural.....	\$15,809	\$9,144
Cutlery.....	16,208	16,623
Domestic ware, including enameled.....	25,318	44,153
Machinery:		
Agricultural.....	4,966	2,043
Sewing machines.....	32,869	34,173
All other.....	180,189	218,581
Rails.....	4,613	4,399
Sheet and plate, including galvanized iron and tin plate.....	28,413	34,514
Tools and implements.....	90,519	87,467
Wire.....	54,447	101,652
Nails and all other manufactures.....	117,146	105,758
Total.....	570,497	658,507

The imports by principal countries under the foregoing subheads were:

	1911	1912		1911	1912
Bars, rods, ingots, castings, and structural iron and steel:			Rails:		
United States.....	\$8,121	\$7,108	United States.....	\$4,613	\$4,309
United Kingdom.....	2,979	1,024	Sheet and plate, including galvanized iron and tin plate:		
Germany.....	4,158	999	United States.....	15,076	16,812
Cutlery:			United Kingdom.....	11,326	13,707
Germany.....	5,287	7,718	Germany.....	1,713	3,803
United States.....	7,453	4,429	Tools and implements:		
United Kingdom.....	2,207	3,055	United States.....	45,575	47,760
Other European countries.	1,251	1,417	Germany.....	61,812	14,861
Domestic ware, including enameled ware:			United Kingdom.....	19,803	23,719
United States.....	4,705	16,322	France.....	4,097	1,023
Germany.....	13,227	15,975	Wire:		
United Kingdom.....	6,465	10,165	United States.....	49,081	79,206
Other European countries.	888	1,687	Germany.....	1,970	19,235
Agricultural machinery:			United Kingdom.....	3,146	2,790
United States.....	14,967	12,043	Nails and all other manufacturers of iron and steel:		
Sewing machines:			United States.....	82,239	71,195
United States.....	132,869	134,173	United Kingdom.....	15,414	18,356
All other machinery:			Germany.....	16,059	12,779
United States.....	90,036	170,499	France.....	2,422	1,934
United Kingdom.....	80,590	27,879	Other European countries.	984	950
Germany.....	6,991	13,242			
Italy.....	1,373	4,999			
Other European countries.	1,106	1,032			
Costa Rica.....	93	930			

¹ Practically all.

WOOLEN GOODS.

This heading is subdivided as follows:

Articles.	1911	1912
Carpets.....	\$1,772	\$3,111
Piece goods.....	76,089	45,063
Wearing apparel.....	73,914	33,956
All other.....	7,244	7,616
Total.....	159,019	89,746

The imports by principal countries under the above subheads were:

	1911	1912		1911	1912
Carpets:			Wearing apparel:		
Germany.....	\$821	\$1,358	United Kingdom.....	\$34,488	\$20,151
United Kingdom.....	752	1,231	United States.....	13,817	4,640
United States.....	42	309	Germany.....	8,859	2,820
France.....	146	208	Guatemala.....	5,401	2,962
Piece goods:			France.....	8,098	2,577
United Kingdom.....	35,884	18,300	Other European countries.	3,152	804
France.....	16,938	10,908	All other manufactures of wool:		
Germany.....	12,106	6,099	Germany.....	3,418	3,717
United States.....	3,202	3,908	France.....	1,408	1,368
Italy.....	7,286	3,342	United Kingdom.....	1,726	1,101
Spain.....	388	1,155	United States.....	395	588
			Italy.....	277	579

PAPER AND MANUFACTURES.

This heading is subdivided as follows:

Articles.	1911	1912
Books and other printed matter.	\$12,633	\$18,243
News-print paper.....	13,201	12,598
Surface-coated paper and blank books.....	21,729	18,462
All other paper.....	47,407	28,527
Total.....	94,970	77,830

The imports by principal countries under the above subheads were:

	1911	1912		1911	1912
Books and other printed matter:			Surface-coated paper and blank books—Continued.		
Germany.....	82,813	85,986	France.....	81,572	81,803
United States.....	2,780	4,420	United Kingdom.....	1,062	944
France.....	3,790	3,605	Other European countries.....	3,144	2,756
Spain.....	1,780	2,646	All other paper:		
United Kingdom.....	845	1,134	United States.....	24,147	9,910
News-print paper:			Germany.....	12,271	9,552
Germany.....	8,103	8,880	Spain.....	3,659	3,054
United States.....	2,096	1,549	France.....	3,274	2,429
Other European countries.....	875	2,569	United Kingdom.....	2,704	1,831
Surface-coated paper and blank books:			Other European countries.....	1,122	1,566
Germany.....	10,029	8,080			
United States.....	5,533	4,683			

PETROLEUM.

	1911	1912
United States.....	\$809,758	\$45,255

¹ Practically all.

HIDES AND SKINS AND MANUFACTURES.

This heading is subdivided as follows:

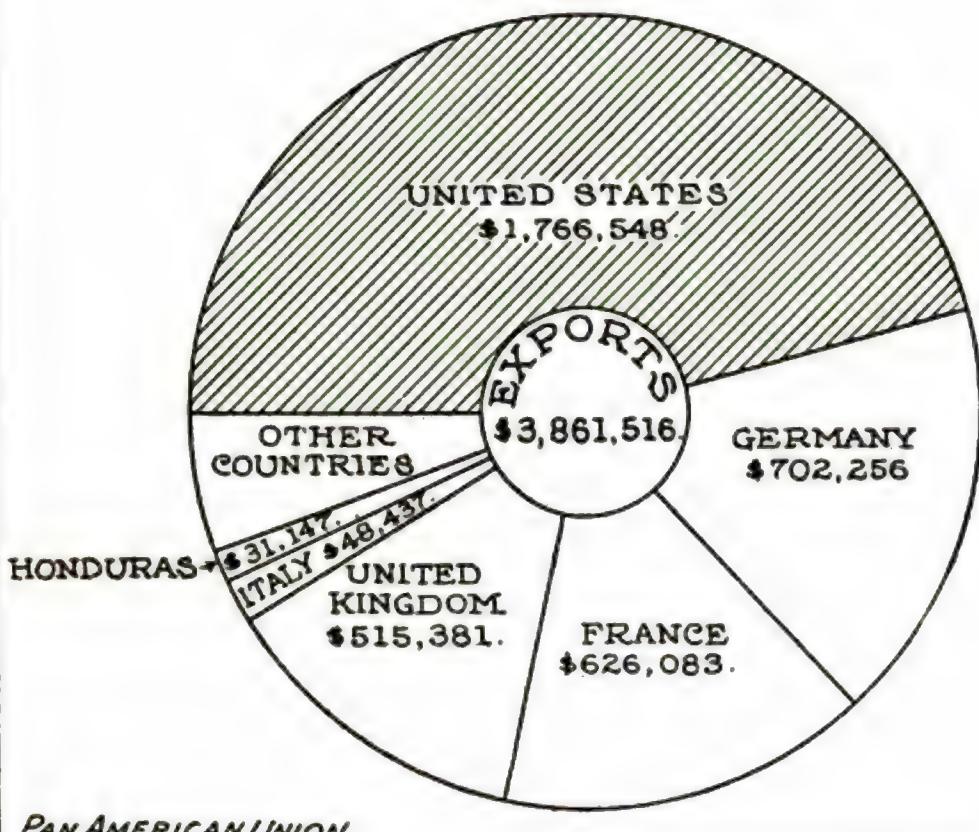
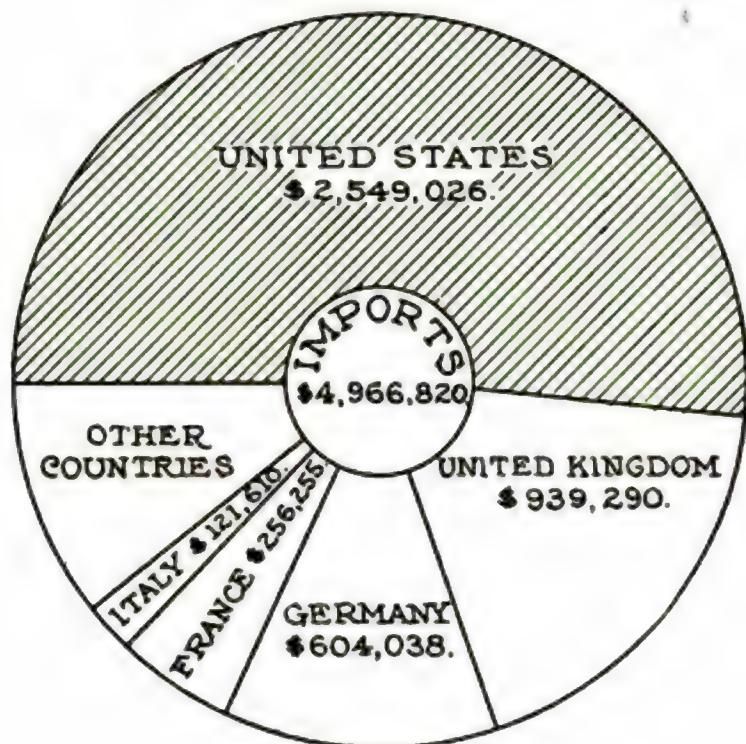
Articles.	1911	1912	1911	1912
Hides and skins, dressed.....			\$114,411	\$45,627
Boots and shoes.....			81,447	76,353
All other.....			29,167	18,575
Total.....			225,025	140,555

The imports by principal countries under the above subheads were:

	1911	1912		1911	1912
Hides and skins, dressed:			All other manufactures of leather:		
United States.....	\$104,894	\$40,471	United States.....	\$18,594	\$8,658
Germany.....	6,446	3,999	United Kingdom.....	5,217	6,496
France.....	2,267	1,043	Germany.....	3,190	1,902
Boots and shoes:			France.....	1,917	1,103
United States.....	74,090	69,044			
France.....	1,271	2,587			
Spain.....	1,351	2,073			
Germany.....	3,475	1,216			
United Kingdom.....	360	610			

NICARAGUA COMMERCE-1912

\$8,828,336.



FOOD PRODUCTS.

The imports under this heading were:

Rice.—In 1911, \$60,026, of which \$26,916 from the United States, \$17,181 from China, \$8,813 from Salvador, \$5,866 from Germany, and \$1,139 from the United Kingdom. In 1912, \$239,801, of which \$119,251 from the United States, \$72,034 from China, \$27,316 from Salvador, \$18,993 from Germany, and \$2,203 from the United Kingdom.

Sugar.—In 1911, \$12,630, of which \$11,329 from the United States and \$714 from Germany. In 1912, \$29,899, of which \$28,331 from the United States, \$761 from Germany, and \$792 from other American countries.

Coffee.—In 1911, \$2,788; in 1912, \$19,575. Practically all from the United States in both years.

Meat and dairy products.—Lard, in 1911, \$10,860; in 1912, \$34,003. Practically all from the United States in both years. Other meat products, in 1911, \$56,828, of which \$48,412 from the United States, \$2,835 from the United Kingdom, \$2,537 from Germany, and \$1,520 from France. In 1912, \$42,926, of which \$37,983 from the United States, \$2,208 from the United Kingdom, \$1,127 from Germany, and \$1,011 from France. Butter, cheese, and substitutes, in 1911, \$17,626, of which \$15,088 from the United States and \$1,159 from the United Kingdom; in 1912, \$27,375, of which \$25,557 from the United States and \$1,164 from the United Kingdom. Milk and substitutes, in 1911, \$13,951, and in 1912, \$12,887, practically all from the United States in both years.

Fruits and products.—The principal imports were canned and preserved fruits; in 1911, \$46,283, of which \$19,977 from the United States, \$17,363 from the United Kingdom, \$6,380 from Germany, and \$2,083 from France; in 1912, \$21,739, of which \$10,033 from the United States, \$9,313 from the United Kingdom, \$1,038 from France, and \$601 from Germany.

Flour.—In 1911, \$314,430, nearly all from the United States; in 1912, \$469,325, of which \$415,083 from the United States, \$40,476 from Honduras, and \$13,728 from Guatemala.

Vegetables and products.—The principal imports were beans; in 1911, \$21,089, and in 1912, \$70,984, practically all from the United States in both years. Prepared or preserved vegetables, including pickles and sauces, amounting in 1911 to \$14,337, of which \$8,313 were from the United States, \$2,840 from the United Kingdom, and \$2,260 from France. In 1912, \$11,914, of which \$8,051 from the United States, \$1,570 from the United Kingdom, and \$1,319 from France.

Indian corn.—In 1911, \$547, practically all from the United States; in 1912, \$57,965, of which \$51,828 from the United States and \$4,400 from Salvador.

Fish and fish products.—The principal import was cured or preserved fish; in 1911, \$39,836, of which \$18,169 from the United States, \$8,330 from France, \$3,932 from Germany, \$3,279 from the United Kingdom, \$2,850 from Spain, and \$3,162 from other European countries. In 1912, \$37,942, of which \$18,329 from the United States, \$4,288 from Germany, \$4,004 from the United Kingdom, \$3,382 from France, \$1,470 from Spain, and \$6,050 from other European countries.

CHEMICALS, DRUGS, AND MEDICINES.

The principal countries of import under this heading were:

Country.	1911	1912	Country.	1911	1912
United States.....	\$183,864	\$90,957	France.....	\$19,156	\$15,618
Germany.....	49,635	33,836	Italy.....	19,998	4,436
United Kingdom.....	30,484	25,996			

SILK GOODS.

This heading is subdivided as follows:

Articles.	1911	1912
Piece goods.....		\$31,800
Wearing apparel.....		57,121
All other.....		65,297
Total.....	154,218	149,085

The imports by principal countries under the above subheads were:

	1911	1912		1911	1912
Piece goods:			Wearing apparel—Continued.		
Japan.....	\$3,663	\$5,302	United Kingdom.....	\$4,462	\$994
France.....	7,225	5,195	Spain.....	111	811
Germany.....	2,470	2,607	Other American countries.	113	849
United States.....	14,499	2,101	Other European countries.	20	688
United Kingdom.....	2,724	993	All other silk goods:		
Other European countries.	725	2,380	France.....	24,906	19,816
Wearing apparel:			Germany.....	17,498	17,440
China.....	8,797	33,686	China.....	9,961	12,330
France.....	11,569	11,998	United Kingdom.....	2,652	3,374
Japan.....	8,725	7,530	United States.....	6,810	2,749
Germany.....	5,626	5,845	Italy.....	1,246	1,239
United States.....	14,916	5,786	Other European countries.	725	2,715
Italy.....	2,782	1,567			

ALL OTHER IMPORTS.

The principal articles included under this head were:

Benzine, gasoline, and naphtha.—1911, \$13,169, of which \$12,514 were from the United States; 1912, \$39,502, of which \$39,163 were from the United States.

Olive oil.—1911, \$6,464, of which \$2,239 were from Italy, \$1,847 from France, \$819 from the United States, and \$802 from the United Kingdom; 1912, \$4,776, of which \$1,762 were from Italy, \$1,100 from the United States, \$912 from France, and \$668 from the United Kingdom.

Vegetable oils other than olive oil.—1911, \$26,374, of which \$24,439 were from the United States; 1912, \$34,731, of which \$33,560 were from the United States.

Chinaware and porcelain.—1911, \$26,224, of which \$9,133 were from the United States, \$8,014 from Germany, \$5,733 from the United Kingdom, and \$2,275 from France; 1912, \$20,990, of which \$8,692 were from Germany, \$4,000 from the United Kingdom, \$1,456 from France, and \$2,686 from other European countries.

Fertilizers.—1911, \$12,203, of which \$5,746 were from Germany, \$5,699 from the United States, and \$759 from the United Kingdom; in 1912, \$66,888, of which \$61,709 were from the United States, \$3,134 from the United Kingdom, and \$2,034 from Germany.

Firearms.—1911, \$17,933, of which \$13,048 were from the United States, \$2,722 from the United Kingdom, \$740 from Germany, and \$1,383 from other European countries; 1912, \$16,049, of which \$8,002 were from the United States, \$5,260 from the United Kingdom, \$381 from Germany, and \$1,246 from other European countries.

Dynamite.—1911, \$8,404, practically all from the United States; 1912, \$9,853, all from the United States.

Gunpowder and other explosives.—1911, \$11,209, of which \$6,170 were from the United States and \$3,042 from China; 1912, \$16,726, of which \$9,537 were from the United States and \$5,294 from China.

Rubber, gutta-percha, celluloid, and manufactures.—1911, \$46,282, of which \$30,620 were from the United States, \$8,290 from Germany, \$4,183 from the United Kingdom, and \$2,511 from France; 1912, \$22,214, of which \$14,978 were from the United States, \$2,505 from Germany, \$1,690 from the United Kingdom, and \$1,483 from France.

Pianos and pianolas, and parts for same.—1911, \$11,174, of which \$6,960 were from the United States and \$3,448 from Germany; 1912, \$14,289, of which \$9,613 were from the United States and \$3,237 from Germany.

Instruments for arts and sciences.—1911, \$29,769, of which \$25,385 were from the United States, \$2,321 from Germany, and \$1,503 from France; 1912, \$14,168, of which \$8,468 were from the United States, \$2,654 from France, and \$1,745 from Germany.

Soap.—1911, \$142,462, of which \$98,982 were from the United Kingdom, \$38,595 from the United States, \$2,873 from France, and \$1,545 from Germany; 1912, \$41,660, of which \$20,545 were from the United Kingdom, \$14,117 from the United States, and \$5,035 from Germany.

Jewelry.—1911, \$40,774, of which \$22,064 were from the United States, \$10,593 from Germany, \$4,452 from France, \$2,930 from the United Kingdom, and \$312 from Italy; 1912, \$31,718, of which \$11,266 were from Germany, \$10,230 from the United States, \$5,271 from Italy, and \$4,107 from France.

Clocks and watches.—1911, \$7,210, of which \$4,577 were from the United States and \$1,199 from Germany; 1912, \$4,110, of which \$2,463 were from the United States and \$1,062 from Germany.

Gold and silver manufactures.—1911, \$5,938, of which \$2,910 were from Germany, \$2,619 from the United States, and \$300 from other American countries; 1912, \$38,354, of which \$35,455 were from the United States, \$2,000 from other American countries, and \$286 from Germany.

Copper and manufactures.—1911, \$44,562, of which \$25,577 were from the United States, \$9,669 from Germany, \$3,635 from the United Kingdom, and \$3,496 from France; 1912, \$35,729, of which \$15,825 were from the United States, \$9,652 from Germany, \$4,969 from the United Kingdom, and \$3,017 from France.

Metals and metal compositions and manufactures (not elsewhere specified).—1911, \$21,066, of which \$15,835 were from the United States, \$2,558 from Germany, and \$1,413 from the United Kingdom; 1912, \$20,849, of which \$10,844 were from Germany, \$6,294 from the United States, and \$2,588 from the United Kingdom.

Toys.—1911, \$10,380, of which \$5,050 were from Germany and \$3,274 from the United States; 1912, \$6,098, of which \$3,700 were from Germany and \$1,602 from the United States.

Woods and manufactures of.—Furniture—1911, \$15,365, of which \$6,044 were from the United States, \$4,046 from Germany, and \$4,696 from other European countries; 1912, \$30,410, of which \$17,890 were from the United States, \$5,509 from Germany, and \$6,951 from other European countries. Wood, unmanufactured, and lumber—1911, \$22,144, of which \$19,958 were from the United States and \$1,149 from other American countries; 1912, \$24,382, of which \$21,501 were from the United States and \$1,827 from other American countries. All other woods—1911, \$37,484, of which \$24,141 were from the United States, \$4,095 from Italy, \$4,080 from Germany, \$3,234 from France, and \$923 from the United Kingdom; 1912, \$27,023, of which \$18,177 were from the United States and \$2,121 from other American countries, \$3,072 from Germany, \$1,031 from the United Kingdom, \$1,203 from France, and \$417 from Italy.

Perfumery, cosmetics, and toilet articles.—1911, \$69,709, of which \$39,409 were from France, \$14,990 from Germany, \$9,624 from the United States, and \$3,310 from the United Kingdom; 1912, \$49,453, of which \$21,216 were from France, \$16,207 from Germany, \$9,770 from the United States, and \$1,952 from the United Kingdom.

Stone and manufactures.—1911, \$19,990, of which \$8,848 were from the United States, \$5,254 from Italy, \$3,830 from Costa Rica, and \$1,095 from Germany; 1912, \$9,625, of which \$3,518 were from the United States, \$2,597 from Italy, \$1,626 from Germany, and \$326 from Costa Rica.

Paints, pigments, and dyes.—1911, \$23,460, of which \$15,186 were from the United States, \$5,374 from Germany, and \$2,415 from the United Kingdom; 1912, \$20,186, of which \$11,061 were from the United States, \$3,625 from the United Kingdom, and \$3,452 from Germany.

Hats and caps and materials for same.—1911, \$59,121, of which \$34,926 were from Italy, \$11,748 from the United States, \$7,427 from Germany, \$2,143 from France, and \$1,739 from the United Kingdom; 1912, \$47,442, of which \$21,687 were from Italy, \$13,048 from the United States, \$6,246 from Germany, \$3,979 from France, and \$1,770 from the United Kingdom.

Tobacco and manufactures.—Cigars and cigarettes—1911, \$11,460, of which \$7,137 were from the United States, \$2,699 from the United Kingdom, and \$686 from other American countries; 1912, \$12,809, of which \$7,359 were from the United States, \$1,035 from the United Kingdom, and \$3,562 from other American countries. All other tobacco—1911, \$6,491, of which \$6,056 were from the United States; 1912, \$8,641, of which \$8,209 were from the United States.

Carriages and parts.—1911, \$11,555, practically all from the United States; 1912, \$9,585, of which \$8,137 were from the United States and \$927 from France.

Wagons and parts.—1911, \$12,994, of which \$8,145 were from the United States and \$4,608 from the United Kingdom; 1912, \$10,523, of which \$6,259 were from the United States and \$3,528 from the United Kingdom.

Candles.—1911, \$30,041, of which \$10,843 were from Germany, \$2,128 from France, \$11,497 from other European countries, and \$5,572 from the United States; 1912, \$16,599, of which \$5,736 were from the United States, \$4,385 from Germany, \$1,109 from France, and \$5,369 from other European countries.

Glass and glassware.—1911, \$41,137, of which \$14,803 were from Germany, \$13,487 from the United States, \$3,910 from France, \$3,709 from the United Kingdom, and \$5,041 from other European countries; 1912, \$39,084, of which \$14,153 were from Germany, \$9,303 from the United States, \$4,673 from the United Kingdom, \$2,645 from France, and \$6,172 from other European countries.

IMPORTS BY PORTS.

Port.	1911	1912
Corinto.....	\$3,721,517	\$2,958,290
San Juan del Sur.....	586,484	465,271
El Bluff.....	954,766	1,233,688
Cabo Gracias a Dios.....	362,006	208,079
Las Palas.....	74,484	89,439
San Juan del Norte.....	23,161	11,646
El Castillo.....	2,217	407
Total.....	5,724,695	4,966,820

EXPORTS.

The value of exports by countries for the years 1909, 1910, 1911, and 1912 was:

Country.	1909	1910	1911	1912
United States.....	\$1,677,010	\$1,553,410	\$2,056,622	\$1,766,548
Germany.....	423,579	824,037	1,075,044	702,256
France.....	776,429	1,024,970	2,619,239	626,063
United Kingdom.....	843,453	656,009	523,100	515,381
Italy.....	44,190	208,103	75,520	48,437
Honduras.....	84,167	10,986	20,106	31,147
Salvador.....	39,395	8,334	24,511	23,009
Costa Rica.....	19,281	11,520	14,598	9,177
Spain.....	1,857	11,746	5,461	1,779
Guatemala.....	1,430	5,220	6,721	721
Other European countries.....	55,374	211,085	105,546	108,959
Other American countries.....	23,263	19,055	52,946	28,019
Total.....	3,989,428	4,545,075	6,579,414	3,861,516

The exports by articles for the years 1911 and 1912 were:

Articles.	1911		1912	
	Quantity.	Value.	Quantity.	Value.
Coffee.....kilos.	7,647,850	\$4,290,505.76	6,162,711	\$1,773,105.29
Gold.....do.	4,774	932,868.59	2,663	907,154.49
Bananas.....bunches.	1,464,724	339,169.47	1,447,077	423,049.42
Hides and skins.....kilos.	424,561	172,921.73	749,770	249,024.33
Rubber.....do.	348,734	578,864.28	153,760	164,830.10
Woods.....do.	1,530,716	41,768.45	5,058,705	120,671.58
Sugar.....do.	253,094	11,259.00	356,980	25,918.00
Cotton.....do.	24,144	5,358.90	116,277	25,957.65
Dyewoods and dyes.....do.	2,917,283	41,977.66	3,087,048	20,281.98
Silver coin.....do.	931	27,588.00	1,355	18,230.75
Silver concentrates.....do.	23	8,444.00	54	4,655.26
Coconuts.....number.	492,369	22,775.00	702,736	16,700.28
Cacao.....kilos.	46,795	11,453.15	35,544	16,545.30
Turtles.....do.	33	99.00	1,695	9,982.68
Lard.....do.	29,462	6,112.29	23,364	5,488.50
Poultry.....do.	5,400	1,592.00	13,060	5,410.60
Corn.....do.	866,510	27,387.48	213,540	5,262.25
Cheese.....do.	31,033	5,155.90	13,794	4,440.95
Shells.....do.	164	937.00	3,320	4,389.75
Leather and saddlery.....do.	227	22.70	6,822	3,264.80
Beans.....do.	103,186	6,689.78	8,249	1,098.90
Seeds.....do.	50	5.00	13,051	1,034.73
Horn.....do.	9,344	676.91	10,076	693.74
Cattle.....head.	50	150.00	42	575.00
Bricks.....kilos.	15,180	300.00	24,000	390.00
Sisal rope.....do.	1,705	60.00	1,882	389.37
Palm leaf for hats.....do.	32	60.00	9,300	375.00
Sweet potatoes.....do.	5,472	5,472	328.58	
Cement.....do.	590	59.00	17,640	312.50
Copper (old).....do.	590	59.00	4,930	303.00
Turpentine.....do.	2,139	190.50	253	74.90
Starch.....do.	47	27.70	59	57.50
Hats.....do.	241	97.60	165	50.70
Hammocks.....do.	337	91.40	201	14.92
Horsehair.....do.	27,591	1,214.80	234	10.00
Fruits.....do.	32	10,000.00		
Gold coin.....do.	4	1,825.00		
Feathers.....do.	32,047	1,434.00		
Tanning.....do.	6,690	632.00		
Soap.....do.	1,183	118.30		
Butter.....do.	991	99.10		
Pepper.....do.	8,800	88.00		
Sawdust.....do.	481	435.00	2,800	1,582.10
Personal effects.....do.	4,982	337.42	3,587	223.61
All other exports.....do.	175,266	30,249.08	346,606	49,643.30
Total.....		6,579,050.95		3,861,540.41

The exports by articles and principal countries in 1911 and 1912 were:

Coffee, clean.—1911 (5,714,753 kilos, worth \$3,696,007)—France, 3,738,124 kilos, worth \$2,574,920; Germany, 1,309,408 kilos, worth \$824,324; United States, 274,620 kilos, worth \$156,821; United Kingdom, 201,452 kilos, worth \$73,862; Italy, 37,198 kilos, worth \$9,299; other European countries, 122,577 kilos, worth \$44,199. 1912 (4,548,739 kilos, worth \$1,371,551)—France, 2,082,265 kilos, worth \$607,127; Germany, 1,657,610 kilos, worth \$514,229; United Kingdom, 394,550 kilos, worth \$126,171; Italy, 156,232 kilos, worth \$46,842; other European countries, 129,391 kilos, worth \$39,050; United States, 122,136 kilos, worth \$36,167. *Shell:* 1911 (1,763,196 kilos, worth \$544,130)—Germany, 691,126 kilos, worth \$220,593; United Kingdom, 468,907 kilos, worth \$159,610; United States, 259,735 kilos, worth \$74,352; France, 55,271 kilos, worth \$28,870; Italy, 126,782 kilos, worth \$25,356; other European countries, 161,375 kilos, worth \$35,349. 1912 (1,535,426 kilos, worth \$390,084.89)—Germany, 572,746 kilos, worth \$143,252; United Kingdom, 461,725 kilos, worth \$122,130; United States, 193,813 kilos, worth \$48,199; France, 21,708 kilos, worth \$5,427; Italy, 5,819 kilos, worth \$1,174; other European countries, 279,615 kilos, worth \$69,904. *Black:* 1911 (169,901 kilos, worth \$50,368)—United States, 51,486 kilos, worth \$13,074; Germany, 15,318 kilos, worth \$6,948; France, 14,251 kilos, worth \$1,492; other European countries, 66,476 kilos, worth \$25,652. 1912 (78,546 kilos, worth \$11,469)—Germany, 39,678 kilos, worth \$5,952; United States, 22,952 kilos, worth \$3,295; France, 15,570 kilos, worth \$2,178.

Gold.—Amalgamated gold: 1911, \$161,741; 1912, \$358,099, all to the United States in both years. Gold in bars: 1911 (\$529,208)—United States, \$305,385; United Kingdom, \$219,823; Germany, \$4,000. 1912 (\$537,692)—United States, \$340,143; United Kingdom, \$195,054; France, \$1,460; Germany, \$1,035. Gold dust: 1911 (\$240,989)—United States, \$214,633; United Kingdom, \$21,856; France, \$4,500. 1912 (\$4,354)—France, \$3,015; United States, \$881; United Kingdom, \$458.

Bananas.—All to the United States in both years.

Hides and skins.—Cattle hides: 1911 (344,947 kilos, worth \$126,122)—United States, 316,013 kilos, worth \$112,971; Germany, 14,292 kilos, worth \$7,938; United Kingdom, 12,637 kilos, worth \$4,872. 1912 (639,710 kilos, worth \$198,286)—United States, 588,516 kilos, worth \$182,562; Germany, 36,711 kilos, worth \$10,420; United Kingdom, 14,483 kilos, worth \$5,303. Deerskins: 1911, 77,805 kilos, worth \$46,337; 1912, 108,966 kilos, worth \$50,205, practically all to the United States in both years.

Rubber.—1911—United States, 341,083 kilos, worth \$565,014; Germany, 5,737 kilos, worth \$8,810; United Kingdom, 1,914 kilos,

worth \$3,041. 1912—United States, 147,606 kilos, worth \$155,760; Germany, 5,827 kilos, worth \$8,416; United Kingdom, 327 kilos, worth \$654.

Woods.—Cedar: 1911—\$35,799, all to Italy. 1912 (\$22,952)—United Kingdom, \$13,604; Germany, \$9,164. Genizaro: 1911, \$1,729; 1912, \$19,105, all to the United States in both years. Mahogany: 1911 (\$2,922)—United Kingdom, \$2,814; Germany, \$108. 1912 (\$78,025)—United States, \$74,346; France, \$3,102; United Kingdom, \$557.

Dyewoods and dyes.—Brazil wood: 1911 (\$1,037)—United Kingdom, \$771; France, \$267. 1912 (\$986)—United Kingdom, \$935; France, \$51. Mora: 1911 (\$26,091)—United Kingdom, \$15,520; France, \$7,533; Italy, \$2,900. 1912 (\$12,654)—United Kingdom, \$10,860; France, \$1,134; Germany, \$599. Namber: 1911 (\$13,819)—United States, \$9,494; United Kingdom, \$3,370; France, \$634; Germany, \$321. 1912 (\$6,583)—United Kingdom, \$4,050; United States, \$2,146; Germany, \$387.

Sugar.—1911—United Kingdom, 32,200 kilos, worth \$700; Honduras, 34,040 kilos, worth \$2,595; other American countries, 186,000 kilos, worth \$7,900. 1912—Honduras, 259,990 kilos, worth \$17,154; Salvador, 13,500 kilos, worth \$415; other American countries, 82,800 kilos, worth \$8,280.

Cotton.—1911—24,144 kilos, worth \$5,359, all to the United Kingdom. 1912—United Kingdom, 107,780 kilos, worth \$23,843; France, 8,497 kilos, worth \$2,114.

Coconuts.—1911—United States, 351,919 coconuts, worth \$13,663; other American countries, 140,450, worth \$9,112. 1912—United States, 550,880 coconuts, worth \$10,858; other American countries, 151,856, worth \$5,842.

Cacao.—1911—Central American countries, 36,609 kilos, worth \$8,845; United States, 10,186 kilos, worth \$2,609. 1912—Central American countries, 22,147 kilos, worth \$9,384; United States, 13,324 kilos, worth \$7,129.

Turtles.—1911—all to the United States. 1912—United States, \$4,019; United Kingdom, \$603; other American countries, \$5,361.

EXPORTS BY PORTS.

Port.	1911	1912
Corinto.....	\$4,805,880	\$1,762,232
San Juan del Sur.....	155,060	188,407
El Bluff.....	936,414	1,123,844
Cabo Gracias a Dios.....	109,665	214,453
Puerto Perlas.....	206,895	121,218
San Juan del Norte.....	2,967	1,054
Total.....	16,216,861	13,411,208

¹ The totals of exports by ports as shown in the above table do not agree with the totals of exports as shown elsewhere in the report of the collector general of customs.

LATIN AMERICAN FOREIGN TRADE IN 1912—A GENERAL SURVEY.

Countries.	Imports.				Exports.				Total foreign trade.	
	1911	1912	Increase.	1911	1912	Increase.	1911	1912	Increase.	
Mexico.....	\$102,937,136	\$91,331,155	-\$11,605,981	\$146,876,819	\$148,904,564	\$2,117,745	\$249,813,955	\$250,325,719	+\$6,498,776	
Guatemala.....	8,166,670	9,822,462	1,655,792	11,156,835	13,156,537	2,150,702	19,816,506	22,975,999	+\$3,816,494	
Salvador.....	5,113,518	6,774,859	1,661,341	9,438,561	9,942,184	503,623	14,552,079	16,717,043	+\$1,164,984	
Honduras.....	3,560,939	4,317,314	758,375	3,024,726	3,080,178	55,452	6,585,665	7,397,492	+\$11,827	
Nicaragua.....	6,724,666	4,966,820	-9,757,876	6,216,861	3,411,208	+2,806,653	11,941,566	8,375,026	+\$3,563,528	
Costa Rica.....	8,967,561	10,187,686	1,220,125	9,020,149	10,071,144	1,050,995	17,987,710	20,258,830	+\$2,271,120	
Panama.....	9,896,988	9,877,617	-22,371	2,863,425	2,064,648	-706,777	12,700,413	11,930,265	+\$24,148	
Cuba.....	113,206,997	125,902,241	12,635,244	122,136,379	172,976,328	49,841,940	236,403,376	208,860,560	+\$2,477,193	
Dominican Republic.....	6,949,662	8,217,898	1,268,236	10,995,546	12,385,248	1,399,702	17,945,208	20,603,146	+\$2,687,938	
Haiti.....	7,948,117	9,876,555	1,928,438	18,553,660	17,285,485	+1,208,175	26,501,777	27,162,040	+\$60,263	
North American Republics.....	272,532,283	281,268,607	8,736,324	341,131,961	361,369,524	\$2,237,583	613,664,244	674,032,131	+\$0,973,887	
Argentina Republic.....	355,906,365	373,307,865	17,501,500	314,966,612	465,979,618	151,022,906	670,762,977	589,257,383	+\$68,624,406	
Bolivia.....	22,764,849	19,308,506	-3,456,343	32,226,157	35,147,965	2,921,808	54,901,000	54,456,471	+\$34,535	
Brazil.....	257,164,128	308,243,736	51,079,608	325,271,614	362,704,846	37,523,232	582,435,742	671,038,582	+\$9,002,84	
Chile.....	127,351,479	122,075,994	-5,305,485	123,884,417	139,878,201	16,983,784	251,263,906	261,934,193	+\$10,686,299	
Colombia.....	18,108,863	23,904,623	5,835,760	22,375,809	32,221,746	9,845,847	40,884,762	56,186,300	+\$15,701,607	
Ecuador.....	8,007,620	11,480,104	3,481,475	13,638,308	12,602,237	1,946,071	21,645,937	24,181,341	+\$2,535,404	
Paraguay.....	6,310,054	5,124,438	-1,185,616	4,703,358	4,084,621	618,737	11,013,412	9,269,069	+\$1,804,353	
Peru.....	26,429,875	25,066,354	-1,363,521	36,041,895	45,871,504	9,829,600	62,471,770	70,937,858	+\$8,466,086	
Uruguay.....	46,590,102	51,355,200	4,765,086	46,318,036	53,040,000	6,721,965	92,908,137	104,365,210	+\$11,487,063	
Venezuela.....	13,394,889	20,568,939	2,174,050	22,684,384	25,200,908	2,576,524	41,079,273	45,820,547	+\$4,750,574	
South American Republics.....	586,958,223	960,504,759	73,546,526	942,100,679	1,176,971,546	224,870,867	1,829,058,912	2,137,476,306	+\$0,308,417,303	
Total Latin America.....	1,159,490,516	1,241,773,366	82,282,860	1,283,232,640	1,570,341,070	277,108,430	2,442,721,166	2,812,114,436	+\$0,301,260	

¹ Fiscal year ending Sept. 30, 1912.² 1910.³ 1911.⁴ Decrease.

LATIN AMERICAN FOREIGN TRADE IN 1912--GENERAL SURVEY :: :: ::

THE foreign commerce of the 20 Latin American countries for the year 1912, customhouse valuations, was \$2,812,114,436, of which amount \$1,241,773,366 represented imports, and \$1,570,341,070 exports. For the preceding year the figures (revised and corrected) are: Imports, \$1,159,490,516; exports, \$1,283,232,640; total, \$2,442,723,156. The increase in imports for the year was \$82,282,850, and in exports \$287,108,430, or an increase in the total trade of \$369,391,280.

The population of these 20 Republics from the most reliable sources of information—estimates in many cases, and in these cases probably overestimates—amounts to about 74,373,000. On this basis the foreign commerce of Latin America for 1912 was \$37.81 per capita—imports, \$16.69, and exports, \$21.12.

The foreign commerce of the United States for the same year was: Imports, \$1,818,133,355; exports, \$2,399,217,993; total \$4,217,351,-348, which, on the basis of the population estimate of 95,410,503 made by the Census Bureau for 1912, shows a per capita of imports of \$19.05 and of exports of \$25.15, or a total of \$44.20. The per capita of Latin American foreign trade was more than 85 per cent of the per capita of the United States trade. In other words, Latin Americans per individual bought within \$2.36 and sold within \$4.03 as much to outsiders as the people of the United States per individual bought and sold to outsiders. The per capita of Latin American foreign trade is many times over the per capita trade of such countries as British India, Japan, and China, and exceeds that of Austria Hungary, Russia, Italy, Spain, Portugal, Roumania, Bulgaria, Servia, Greece, and Turkey.

The per capita trade of a number of the Latin American countries exceeded the like trade of the United States and of the leading western European countries. For example, the per capita of Cuban commerce—imports, \$58.24; exports, \$80.02; total, \$138.26—exceeds that of any of the countries last mentioned and is over three times as great as that of the United States. The Argentine per capita of \$120.08 (imports, \$53.41; exports, \$66.67), the Uruguayan per capita of \$100.12 (imports, \$49.25; exports, \$50.87), and the Chilean of \$74.83 (imports, \$34.87; exports, \$39.96), all show averages either

above or comparable with those of the leading commercial countries of the world.

In this connection it must be taken into account that the basis of customhouse valuations of imports in nearly all the Latin American countries, and in particular in such countries as Argentina, Uruguay, and Chile, represents, as compared with the United States, France, Germany, England, and other like commercial countries, a gross under-statement of true values. This is due to valuations based on fixed appraisements and limited classifications as opposed to the more accurate valuations made under the tariff systems in operation in the United States and Europe. It is safe to say that to the Argentine customhouse valuations of imports at least 30 per cent must be added. In some classes of goods 100 or even 200 per cent additional must be added in order to arrive at anything like real values.

If these adjustments were made, the per capita of imports in the Latin American countries would be increased very considerably, making comparisons with other countries much more favorable to Latin America.

TRADE BALANCES.

The following table gives the trade balances of the Latin American countries for the years 1910, 1911, and 1912. Plus (+) means excess of exports over imports and minus (-) excess of imports over exports.

Countries.	Trade balance.		
	1910	1911	1912
Mexico.....	+ \$32,590,244	+ \$43,939,683	+ \$57,663,409
Guatemala.....	+ 14,827,902	+ 2,839,165	+ 3,334,075
Salvador.....	+ 3,552,587	+ 4,325,043	+ 3,167,325
Honduras.....	- 124,091	- 536,213	- 1,237,136
Nicaragua.....	+ 1,406,171	+ 492,166	- 1,555,612
Costa Rica.....	+ 481,754	+ 52,588	- 116,542
Panama.....	- 8,287,064	- 7,038,563	- 7,806,969
Cuba.....	+ 47,283,439	+ 9,869,382	+ 47,076,087
Dominican Republic.....	+ 4,501,932	+ 4,045,884	+ 4,167,350
Haiti.....	+ 3,826,483	+ 10,605,543	+ 7,408,930
North American Republics.....	+ 89,698,757	+ 68,599,678	+ 112,100,917
Argentina.....	+ 20,229,735	- 40,849,753	+ 92,671,633
Bolivia.....	+ 10,945,957	+ 9,461,308	+ 15,839,459
Brazil.....	+ 74,431,601	+ 68,107,486	+ 54,551,110
Chile.....	+ 11,439,640	- 3,497,062	+ 17,801,207
Colombia.....	+ 509,516	+ 4,267,036	+ 8,257,123
Ecuador.....	+ 14,548,046	+ 5,030,678	+ 1,203,133
Paraguay.....	+ 1,337,448	- 1,006,696	- 1,039,817
Peru.....	+ 8,036,229	+ 9,612,020	+ 20,805,150
Uruguay.....	+ 536,419	- 272,067	+ 1,684,800
Venezuela.....	+ 5,561,019	+ 4,289,495	+ 4,691,968
South American Republics.....	+ 138,265,613	+ 55,142,445	+ 216,466,786
Total Latin America.....	+ 237,904,370	+ 123,742,123	+ 328,567,703

1909.

1910.

1911

The remarkable increase in the foreign trade of Latin America in 1912 as compared with the preceding year, amounting to 15 per cent, was more or less unexpected and represents an increase above the average increase which has been more or less constant.

The following table shows the increase in Latin America trade for 15 years:

	Imports.	Exports.	Total.
1912.....	\$1,241,773,366	\$1,570,341,070	\$2,812,114,436
1897.....	415,079,562	495,342,937	910,422,499
Increase.....	862,693,804	1,074,342,937	1,901,691,937
Per cent of increase, 15 years.....	199	217	208
Average yearly per cent of increase.....	13.3	14.5	13.9

IMPORTS.

Latin America imports are in general of the same character in all of the countries. In most of the countries there are but few manufactures, and none of them from the European or North American standpoint would be considered manufacturing countries. Even in Brazil, Argentina, Mexico, and Chile, where enterprise has accomplished more than elsewhere, the lines of manufacture are very few and generally the output small as compared with the imports of like articles. In a very limited number of cases high protective duties give a monopoly to domestic manufactures. Refined sugar is an example of this monopoly in several states; low-grade cotton goods in Brazil are also included in this class. But, generally speaking, tariff duties are revenue duties, and not intended to discourage importations.

The demand for finished manufactured goods is great in all of the countries, and this demand includes practically every line of European or North American manufacture. In other words, whatever is saleable in New York, London, or Paris is also saleable in Rio, Buenos Aires, Montevideo, Santiago, Lima, Mexico, Habana, and other Latin American cities.

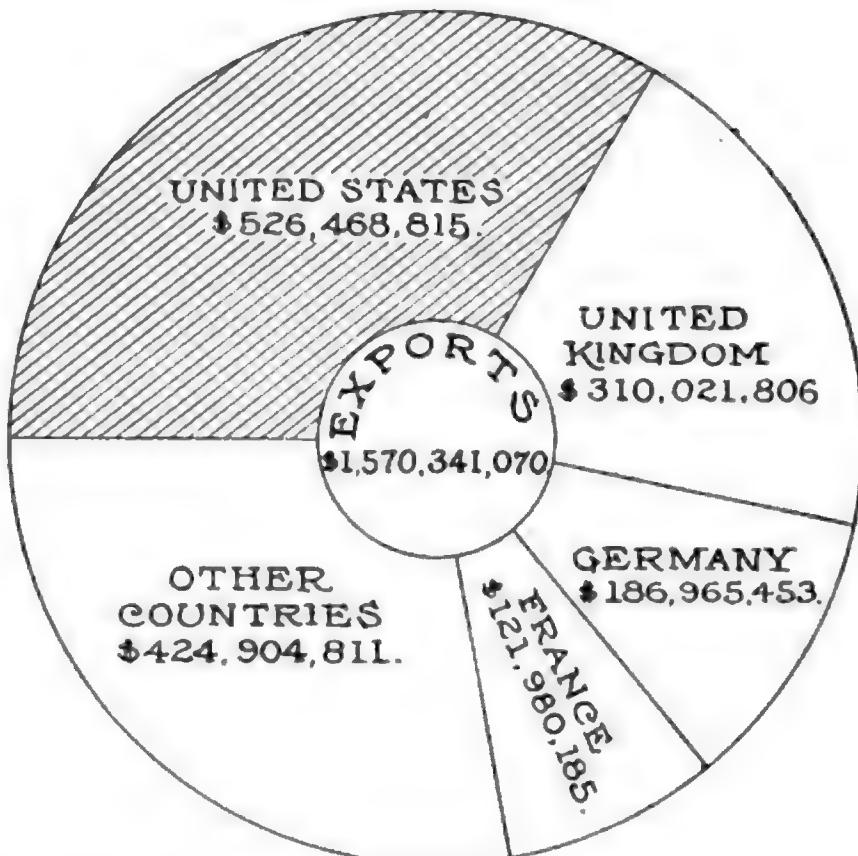
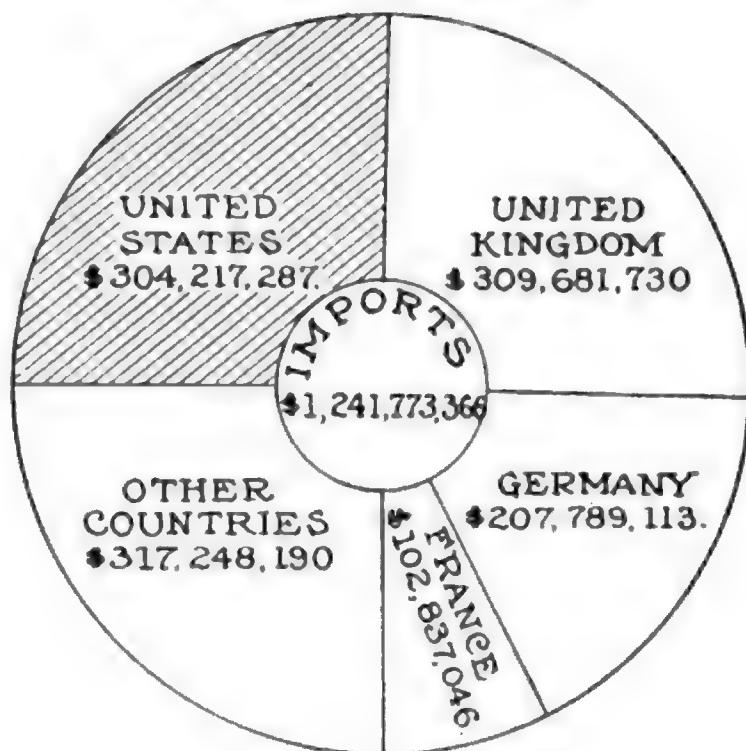
EXPORTS.

On the contrary, Latin American exports, while in general falling in one class—that is, raw materials for use in manufacturing, metals, and primary food products—yet owing to the great differences of soil, climate, rainfall, and other natural conditions, proximity or remoteness to markets and development of transportation systems are widely differentiated in the several countries.

The greatest development of mineral wealth and the largest proportionate export of minerals are in such countries as Mexico, Colombia, Peru, Bolivia, and Chile. But there is a wide difference in the character of mining and in the class of minerals exploited in these countries. Gold is produced, but in no very great quantities, in many of the countries, but only in Mexico and Colombia does the production of gold attain to figures of world importance. Silver is produced in many countries, but only in Mexico to a considerable

LATIN AMERICA COMMERCE 1912

\$2,812,114,436.



PAN AMERICAN UNION

amount. The rarer metals, platinum, vanadium, and the like, are found, often in good-paying quantities, all through the Andean country from Colombia to Chile. Chile, Peru, and Bolivia are the principal producers of copper; Cuba of iron ore, although the great deposits of Chile and of Brazil will undoubtedly soon come into the market. Mexico and Peru are at present the principal sources of the Latin American supply of crude oils, but the known fields of Colombia, Venezuela, and Ecuador will no doubt soon be developed. Bolivia is the great source of Latin American output of tin and bismuth.

The exportation of forest products, outside of rubber, ivory nuts, and quebracho, has not attained in any country the importance that it is destined to attain in nearly all of them.

Rubber as a forest product has been or is exported from all of the Latin American countries except those of the southern third of South America—that is, excepting those within the Temperate Zone.

The export of woods, particularly fine cabinet woods, can scarcely be said to have made a beginning in any of the countries. Its principal development has been in the countries bordering on the Caribbean.

The great possibilities of the animal industries in nearly, if not all, of the Latin American countries as a basis of an export trade have been taken advantage of in comparatively few countries. Outside of Argentina (where progress in this line has been marvelous), Chile, Uruguay, and southern Brazil, animal industries are limited to supplying home needs and the exportation of by-products—hides, hoofs, etc. The great possibilities of western Brazil, Bolivia, Peru, Ecuador, Colombia, and Venezuela as meat-exporting countries await development in the future, and even Argentina, Uruguay, and Chile have possibilities for exportation of animal products in quantities vastly beyond the present export.

Coffee is an export of all of the countries bordering on the Caribbean, and in addition Ecuador, Peru, and Brazil—Brazil, of course, being the principal source of the world's supply of coffee.

Cacao is produced in general in all of the countries producing coffee, though not in the same localities.

The export of grain, wheat, oats, linseed, Indian corn, flour, bran, and hay is almost the monopoly of Argentina, although Chile exports some small quantities of these farm products and in addition beans and fruits. Outside of the countries named most Latin American countries are importers of wheat and flour. This condition will exist for some time to come.

Sugar.—Cuba is the principal sugar country, its production being far in excess of all the rest of America. But the Dominican Republic, Haiti, and Peru are also exporters.

THE PAN AMERICAN UNION.

DISTRIBUTION OF TRADE—IMPORTS.
LATIN AMERICAN IMPORTS FROM LEADING COMMERCIAL COUNTRIES.

Countries.	Total from all countries.		United Kingdom.		Germany.		France.		United States.	
	1911	1912	1911	1912	1911	1912	1911	1912	1911	1912
Mexico.....	\$102,937,136	\$91,331,155	\$11,984,486	\$10,733,154	\$12,781,005	\$11,922,609	\$7,336,642	\$7,800,138	\$56,573,492	\$49,212,836
Guatemala.....	8,160,670	9,822,462	1,642,752	1,730,598	1,900,823	2,250,862	1,367,663	436,892	3,370,170	4,532,361
Salvador.....	5,113,518	6,774,869	1,543,828	1,904,546	353,177	664,674	396,026	397,262	1,815,061	2,637,700
Honduras.....	3,560,939	4,317,214	500,029	546,473	300,635	487,909	97,771	190,262	2,524,133	2,891,838
Nicaragua.....	5,724,606	4,966,820	1,412,296	930,290	642,753	604,058	448,264	256,265	2,754,940	2,549,026
Costa Rica.....	10,187,696	11,553,119	1,391,003	1,704,746	1,503,746	1,503,944	443,904	424,189	4,153,153	5,966,906
Panama.....	8,967,561	9,871,617	2,273,386	2,421,637	1,119,224	967,806	387,004	690,784	5,122,960	5,413,306
Cuba.....	9,866,968	13,699,060	15,397,849	7,234,657	8,431,201	6,203,125	7,706,004	60,015,006	65,416,475	5,100,001
Dominican Republic.....	125,902,241	13,699,060	773,802	720,212	1,266,299	1,628,280	213,453	224,912	4,120,453	5,700,263
Haiti.....	7,948,117	9,876,555	886,517	761,206	439,733	484,915	331,849	1,050,416	5,790,263	7,302,484
North American Republics.....	272,532,283	281,268,607	35,272,274	36,574,788	28,013,090	27,936,304	18,206,642	19,176,274	146,239,590	150,911,934
Per cent of imports.....	100	100	13.31	13.00	10.27	10.28	6.67	6.81	53.65	53.65
Argentina.....	355,806,366	373,307,805	106,378,207	115,109,149	63,886,346	62,023,257	36,885,758	36,490,020	50,782,788	57,353,142
Bolivia.....	22,764,849	19,308,506	4,863,318	3,537,112	4,021,264	6,440,316	1,104,391	949,886	3,847,200	1,791,911
Brazil.....	237,164,128	308,243,736	74,666,592	77,615,648	43,180,830	53,018,079	22,744,830	27,751,004	34,300,227	48,100,316
Chile.....	127,381,479	122,075,904	40,806,052	38,616,866	32,090,171	33,180,070	6,931,714	7,261,061	13,773,960	16,806,341
Colombia.....	18,108,863	23,964,623	5,838,780	7,838,878	3,242,634	4,201,125	1,714,747	2,011,886	5,404,975	7,612,037
Ecuador.....	1,8,007,629	11,459,104	1,2,455,590	2,844,473	1,370,903	2,381,573	1,526,634	1,714,426	1,2,249,674	2,588,168
Paraguay.....	6,310,054	5,124,438	1,802,094	1,460,000	1,770,406	1,400,000	342,707	326,000	379,307	312,000
Peru.....	26,429,875	25,066,364	8,358,383	8,000,000	4,598,565	1,4,300,000	1,407,114	1,1,300,000	6,000,863	5,700,000
Uruguay.....	46,590,102	51,355,200	12,648,270	13,800,000	7,894,644	8,700,000	3,952,473	4,300,000	6,671,318	6,200,000
Venezuela.....	18,394,889	20,568,939	5,233,966	4,284,896	3,106,946	3,100,369	1,837,564	2,616,400	5,219,568	6,822,438
South American Republics.....	890,048,233	900,504,759	262,009,378	273,106,932	164,057,707	178,862,900	77,470,841	83,600,772	129,701,059	133,206,353
Per cent of imports.....	100	100	29.43	28.43	18.73	18.62	8.74	8.71	14.62	15.96
Total of the 20 Republics.....	1,159,490,516	1,241,773,366	298,371,052	309,681,730	194,070,707	207,789,113	96,677,483	102,837,046	275,940,649	204,217,287
Per cent of imports.....	100	100	100	100	25.73	24.93	16.73	16.73	23.79	24.49

^a Estimated in part.^b Estimates.^c 1911.^d 1910.

DISTRIBUTION OF TRADE—EXPORTS.

LATIN AMERICAN EXPORTS TO LEADING COMMERCIAL COUNTRIES.

	Total to all countries.		United Kingdom.		Germany.		France.		United States.	
	1911	1912	1911	1912	1911	1912	1911	1912	1911	1912
Mexico.....	\$146,876,819	\$148,994,564	\$17,941,176	\$20,099,328	\$4,354,171	\$5,158,365	\$4,654,939	\$4,164,911	\$113,167,935	\$112,729,956
11,006,835	13,150,537	1,324,761	1,458,498	6,851,817	6,975,006	19,333	19,333	3,297,156	3,893,829	
Guatemala.....	9,438,361	9,942,184	555,710	445,456	1,669,233	2,294,500	2,272,190	1,510,492	2,955,794	
Salvador.....	3,024,726	3,080,178	42,518	20,051	107,596	128,756	2,888	1,817	2,692,027	2,722,049
Honduras.....	6,216,801	3,411,208	623,100	514,774	1,074,744	701,881	2,619,240	626,083	1,703,481	1,328,422
Nicaragua.....	9,020,149	10,071,144	3,586,939	4,193,036	304,124	569,566	60,906	131,683	4,973,473	5,025,694
Costa Rica.....	2,863,425	2,004,648	125,170	117,714	157,301	202,152	4,683	7,863	2,575,816	1,779,660
Panama.....	123,136,379	172,978,328	5,697,314	11,446,336	3,641,555	6,190,172	1,307,517	2,574,735	100,853,343	145,185,933
Cuba.....	10,995,546	12,385,248	763,881	1,242,980	2,946,858	1,774,049	1,080,706	933,212	5,751,464	7,274,60
Dominican Republic.....	18,553,660	17,285,485	1,200,000	1,300,000	5,400,000	6,100,000	7,500,000	8,500,000	1,000,000	1,100,000
Haiti.....										
North American Republics.....	341,131,901	393,369,524	31,761,559	40,793,173	25,509,399	30,093,447	19,522,402	18,451,765	245,104,896	283,965,903
Per cent of exports.....	100	100	9.31	10.37	7.18	7.65	5.72	4.69	71.85	72.18
Argentina.....	465,979,518	59,085,994	117,732,157	41,790,824	52,375,319	38,501,661	34,970,448	23,571,450	31,419,413	
Bolivia.....	32,226,157	35,147,965	23,237,089	26,112,023	4,287,162	4,368,301	2,632,828	2,133,950	2,444,345	1,62,976
Brazil.....	325,271,614	362,794,846	46,920,905	43,065,547	47,212,339	51,928,196	25,739,496	35,514,990	115,855,767	141,914,885
Chile.....	123,894,417	139,878,201	53,258,282	55,102,650	26,199,771	28,060,695	5,865,179	7,668,570	19,561,933	24,514,565
Colombia.....	32,273,809	4,596,137	4,376,182	1,910,353	1,824,211	769,213	625,198	12,522,905	15,822,882	
Ecuador.....	13,638,308	12,692,237	1,136,827	1,984,831	1,2,243,607	2,136,695	1,4,785,613	1,4,530,135	1,4,082,112	3,185,808
Paraguay.....	4,703,358	4,084,621	1,799	800	983,948	800	72,694	61,000	8,4,700	4,000
Peru.....	36,041,805	46,871,504	12,017,921	14,270,000	2,776,766	3,500,000	11,902,446	2,400,000	10,187,997	12,900,000
Uruguay.....	46,318,035	53,040,000	6,342,000	6,545,902	4,7,719,000	7,905,882	11,579,000	8,801,137	2,088,000	2,670,779
Venezuela.....	22,684,384	23,260,908	1,226,377	1,038,551	4,269,211	3,942,708	6,120,445	6,822,992	7,083,261	9,907,604
South American Republics.....	942,100,679	1,176,971,546	236,722,421	260,228,633	139,302,981	156,872,006	97,908,551	103,528,420	194,918,560	242,502,912
Per cent of exports.....	100	100	25.12	22.02	14.79	13.31	10.39	8.71	20.68	20.60
Total of the 20 Republics.....	1,283,232,640	1,570,341,070	268,483,980	310,021,800	164,902,380	186,905,453	117,490,953	121,980,185	440,023,456	526,468,815
Per cent of exports.....	100	100	20.92	19.74	12.85	11.90	9.15	7.76	34.29	33.52

^a Estimated in part.^b Estimates.^c 1910.

DISTRIBUTION OF TRADE.

Four countries lead in Latin American trade—the United States, the United Kingdom, Germany, and France—and, generally speaking, these four countries are rivals in the same class of trade, both imports and exports. They together control about three-fourths of the total. In the field of Latin American exports this rivalry is real and active and extends over the whole range of products, except to Argentine meat and grain exports. In imports the case is somewhat different, since the United States in fully half the classes has scarcely, if at all, entered the field in competition with the three European countries named. In a few classes, such as mineral oils, breadstuffs, and lumber, it enjoys practically a monopoly, or shares this monopoly with other American countries.

The following table shows the proportionate share of the four countries mentioned in Latin American trade. Taken as a whole, exports and imports together, it will be seen that the United States occupies the first rank.

Total trade—All Latin America, 1912.

	Total.	United States.	United Kingdom.	Germany.	France.
Value.....	\$2,812,114,436	\$830,686,102	\$619,703,536	\$394,754,566	\$234,817,231
Per cent of whole.....	100	29.54	22.03	14.04	7.99

In Latin American imports alone the United Kingdom leads by a small margin, as shown in this table:

Imports—All Latin America, 1912.

	Total.	United States.	United Kingdom.	Germany.	France.
Volume.....	\$1,241,773,366	\$304,217,287	\$309,681,730	\$207,789,113	\$102,837,046
Per cent of whole.....	100	24.49	24.93	16.73	8.28

In Latin American exports the lead of the United States is quite pronounced.

Exports—All Latin America, 1912.

	Total.	United States.	United Kingdom.	Germany.	France.
Volume.....	\$1,570,341,070	\$526,468,815	\$310,021,906	\$186,965,453	\$121,980,185
Per cent of whole.....	100	33.52	19.74	11.90	7.76

As regards the position of the United States in Latin American trade, as compared with that of the United Kingdom, Germany, and France, a line drawn at the Isthmus of Panama shows a rather

ARGENTINE REPUBLIC

The FOREIGN COMMERCE of the Argentine Republic in 1913 amounted to 904,857,089 Argentine gold pesos (\$873,187,090), or 39,612,364 Argentine gold pesos (\$38,225,933) more than in 1912, or a gain in 1913, as compared with 1912, of 4.6 per cent. Of the total foreign trade in 1913 the sum of 421,352,542 Argentine gold pesos (\$406,605,203) were imports and 483,504,547 Argentine gold pesos (\$466,581,888) were exports, or an excess of exports over imports of 62,152,005 Argentine gold pesos (\$59,976,685). The four largest classifications of imports were textiles and textile products, 89,560,214 Argentine gold pesos (\$86,425,606); iron and manufactures thereof, 50,040,305 Argentine gold pesos (\$48,288,894); stones, earths, glass-ware, and ceramics, 36,577,931 Argentine gold pesos (\$35,297,703), and building materials, 35,775,580 Argentine gold pesos (\$34,523,435).

—The first estimate made by the Bureau of Rural Statistics of the Argentine Government concerning the PRODUCTION OF CEREALS during the fiscal year 1913-14 shows an aggregate of 14,850,000 tons, valued at 945,021,157 pesos (Argentine peso equals \$0.424), as compared with 13,090,000 tons, valued at 907,998,714 pesos for 1912-13. The estimate for 1913-14 in detail is as follows: Wheat, 3,580,000 tons, valued at 295,915,994 pesos; corn, 9,000,000 tons, valued at 471,062,529 pesos; flax, 990,000 tons, valued at 110,136,178 pesos; oats, 1,020,000 tons, valued at 53,155,271 pesos; barley, 175,000 tons, valued at 9,736,246 pesos; and rye, 85,000 tons, valued at 5,014,939 pesos. In 1913 the area sowed in wheat was 6,573,540 hectares; flax, 1,779,350 hectares; oats, 1,249,300 hectares; barley, 169,350 hectares; and rye, 92,300 hectares, or a total area of the cereals mentioned of 9,863,840 hectares.—The conference of governors of the national territories of the Argentine Republic, held in Buenos Aires during the latter part of December, 1913, recommended the printing of illustrated and artistic publications in different languages describing the cordillera region of Argentina, lacustrine views, and Tierra del Fuego. Acting upon this recommendation the Director General of Territories asked the President of the Republic to request that 500 copies of the reports made by the American engineer, Bailey Willis, while in the employ of the department of public works of the Argentine Government, be printed in Washington, and especially his descriptions of the natural beauties of Lake Nahuel Huapi, together with panoramic views. Mr. Willis has placed his reports at the disposal of the Argentine Government. The intention is to make

a NATIONAL PARK out of the Lake Nahuel Huapi region, whose beauties are said to equal, if not to surpass, those of the famous Yellowstone Park of the United States.—The population of BUENOS AIRES is estimated at 1,500,000 inhabitants, as compared with 1,415,508 on Nov. 30, 1912.—A Government agronomist and inspector recently visited "La Rosita," a FRUIT PLANTATION in the Province of Corrientes. This fruit farm has 20 hectares of land planted in mandarin trees, 200 trees to the hectare. Orange, peach, and grape cultivation is also carried on. The cost of operating this plantation is reported to be 300 pesos per month, and the revenues derived therefrom are 1,200 pesos a month. The entire plantation consists of 40 hectares of land in a high state of cultivation. Other fruit farms visited in this section of the Province of Corrientes are reported to give similar results.—On December 31, 1913, there were 33,483 kilometers of RAILWAYS in the Argentine Republic, 10,021 kilometers of which were narrow gauge, 2,593 kilometers medium gauge, and 20,869 kilometers wide gauge. Of these railways 27,924 kilometers belonged to private parties and 5,559 kilometers to the State. These railways transported in 1913 80,279,940 passengers and 43,038,082 tons of freight and represented an investment of 1,210,475,331 Argentine gold pesos (gold peso equals \$0.9647). The gross railway receipts during that year amounted to 142,233,334 gold pesos, the expenses to 89,419,518 gold pesos, and the net profits to 52,813,816 gold pesos, or an average interest on the capital invested of 4.36 per cent.



As early as 1882 a concession was granted by the Bolivian Government to two Argentine citizens for the construction of a RAILWAY from La Quiaca on the Argentine frontier to La Paz, Bolivia, via Potosi and Oruro. This concession, which was conditional on the building of the Northern Central Argentine Railway to Quiaca, failed, inasmuch as the road referred to was not completed to Quiaca until 25 years later. On June 30, 1894, a convention was signed at Buenos Aires between the representatives of the Bolivian and Argentine Governments in which the Government of the Argentine Republic agreed to make the surveys necessary to extend the Northern Central Railway to such a point on the Bolivian frontier as might be deemed most desirable for the prolongation of the railway into Bolivia, the Bolivian Government agreeing to make the survey from the latter

point into the interior of the Republic of Bolivia. Eight years thereafter another agreement was signed in Buenos Aires providing for the extension of the railway from Quiaca to Tupiza by the Argentine Government. In carrying out this agreement a new convention was concluded in Buenos Aires between the Bolivian and Argentine Governments on May 18, 1907, the object of which was to definitely arrange for the extension of the railway, which at that time was almost finished as far as Quiaca, from the latter place to Tupiza. Under this convention railway construction material was to be brought from Rosario, Argentine Republic, to Tupiza, Bolivia, and the construction of the line was to be accomplished through contracts awarded through competitive bids. Misunderstandings concerning the construction of the line having arisen, a protocol was signed setting aside the conventions of June 30, 1894, December 11, 1902, February 17, 1906, and May 18, 1907, and the work of construction of the Tupiza to Quiaca Railway, together with its branch lines, was left to the Bolivian Government. Last year the President of the Republic of Bolivia was authorized by Congress to negotiate a loan of £1,000,000 (\$5,000,000) for the construction of the Quiaca to Tarija Railway, either administratively or through competitive bids, and recently bids have been received from three prominent contractors for the building of the railway to Tupiza. Both of the lines referred to will connect at Quiaca with the Northern Central Argentine Railway. The Quiaca to La Paz Railway, via Tupiza, with connecting lines to Tarija and Potosi, passes through one of the most thickly populated and richest sections of Bolivia, and especially the celebrated mining regions of Potosi, Huanchaca, and other mineral zones along the main line and extending for long distances beyond it in both directions. The road also passes through fine tracts of agricultural and grazing lands.—A law has been promulgated declaring the BUDGET for 1914 in force until Congress approves a budget for 1915.—Señor Adolfo Ballivian, consul general of Bolivia in New York, has compiled statistics showing that the EXPORTS from New York to Bolivia in December, 1913, consisted of 6,832 packages of merchandise weighing 378,763 kilos, valued at \$86,752.04. The principal items of export, in the order of their importance, were hardware, machinery, cotton goods, and corrugated iron. Nearly all of this merchandise was imported through the ports of Mollendo, Peru, and Antofagasta, Chile.—Eucalyptus trees to the number of 5,000 have been set out in the Cliza Valley by Manuel Barrientos. The Cliza Valley produces wheat, maize, and other cereals in abundance, and while the eucalyptus tree, when planted, thrives in that region, there has been no systematic effort made up to the present time at tree culture on a large scale.—A law promulgated on January 1, 1914, gives the BANK OF THE NATION

the sole right for 25 years to issue bank notes, restricting the issue to 150 per cent of its paid up capital. The smallest denomination is 5 bolivianos (\$2) and the highest 500 bolivianos (\$200). The bank is required to redeem its bills at sight. In addition to the tax on the net profits of the bank, it must pay during the first three years one-half per cent on the amount of its bank notes actually in circulation, 1 per cent during the six years following, and 1½ per cent after that time.



The BUDGET of the Government of Brazil for 1914, according to figures published in the "Jornal do Commercio," gives estimated revenues amounting to 435,773 paper contos and 95,469 gold contos. (Paper conto, \$324; gold conto, \$546.) The expenditures are calculated at 130,219 gold contos, and 367,511 paper contos.—In December, 1913, IMMIGRANTS to the number of 5,470 arrived at the port of Rio de Janeiro.—One of the islands belonging to the Government in the Bay of Rio de Janeiro, and which has hitherto been used by the Treasury Department, has been given to the Department of the Navy to be used as headquarters of the Superintendent of NAVIGATION of the Brazilian Government.—In April next the Government of Brazil will open a MILITARY SCHOOL in the admiralty building in Rio de Janeiro.—The RAILWAY from Carris to Ipanema is being extended to Leblon Beach, a distance of 2,630 meters, through exceedingly picturesque surroundings.—The legation of Portugal at Rio de Janeiro was raised to the rank of an EMBASSY on January 1 of the present year.—The municipal council of the City of Rio de Janeiro has submitted to the mayor for approval the MUNICIPAL BUDGET for the year 1914, showing estimated receipts of 41,939 contos and estimated expenditures of 41,935 contos (paper conto, \$324).—The GEOGRAPHIC SOCIETY at Rio de Janeiro has elected Baron Homen Mello as its President for 1914.—A bill has been introduced into the House of Deputies of the Congress of Brazil providing for the appointment of a commission to study the organization and operation of FRATERNAL SOCIETIES.—The chief of the department of public health of the Government of Brazil reports the absence of YELLOW FEVER at Manaos and throughout the entire Amazon Valley.—A decree has been signed by the President of the Republic giving 30 contos (\$9,720) as the contribution of the Government of Brazil to the AERO CLUB. The recent visit to Rio de Janeiro of the distinguished Brazilian aviator, Santos

Dumont, aroused great enthusiasm in aviation circles.—The Brazilian SQUADRON engaged in extensive maneuvers in March of the present year at and in the neighborhood of the port of Florianapolis, State of Santa Catharina, Southern Brazil.—A number of Porto Alegre capitalists have taken preliminary steps to establish a permanent EXHIBIT OF FINE STOCK for breeding purposes in Rio Grande do Sul under the management of Jão Peixao Cortez, an experienced stockman. It is proposed to obtain choice breeds of cattle, sheep, and other stock in Uruguay, Argentina, and other countries.—The Secretary of War has arranged to have special instruction in AVIATION and aviation mechanics taught in the army school to 45 officers and soldiers selected for that purpose.—Great improvements are taking place in the avenues along the water front of the city of Rio de Janeiro and vicinity. In addition to the long and beautiful drive which borders the Guanabara and Botafogo Bays, and which is such a great attraction to tourists, another driveway (Atlantic Avenue) is being constructed along the extensive shores of Copacabana and Ipenema beaches with the object of connecting with Rio Branco Avenue and establishing a continuous thoroughfare several kilometers in extent along the bay and the Atlantic Ocean.—The ARMY of Brazil has been increased from 21,000 to 25,015 men.—Congress has appropriated 1,500 gold contos (one gold conto equals \$546) for expenses at the Panama-Pacific EXPOSITION to be held at San Francisco in 1915.—The ARBITRATION convention between Brazil and Salvador has been promulgated.—A factory for the manufacture of EXPLOSIVES is to be established near Rio de Janeiro by Portuguese capitalists.—Brazil's LARGEST CATTLE COMPANY now owns 9,000,000 acres of land, most of which was purchased from private owners. All available cattle lands within easy reach of Rio de Janeiro have been taken up and intending settlers must look to newer sections of the country.—American manufacturers are urged to make QUOTATIONS F. O. B. New York or C. I. F. Rio de Janeiro in endeavoring to extend their trade in Brazil. It is better to leave the matter of calculating customs duties to the importers who are on the ground and therefore in closer touch with local conditions.—The METAL BED INDUSTRY in Brazil is increasing in importance, and although the country possesses abundance of splendid hardwoods suitable for furniture making, the same is very expensive, and metal beds can be made much cheaper. Materials for manufacturing the latter, such as tubing, castors, wire springs, knobs, etc., are imported; at present the bulk of such material comes from England. Tubing of various diameters is needed, suitable for different beds ranging from those for infants to double beds for adults; the cutting, bending, painting is done locally.



CHILE

Early in 1912 a detailed study of the Tarapacá mining region was begun by the Department of Mines of the Government of Chile, and was continued in 1913, for the purpose of collecting data and the making of a MAP showing the mineral zones and the principal mines of that and other Provinces of northern Chile. Special attention was given to the Collahuasi, La Mocha, Lagunas, and a number of other mining districts, and reports were made upon the irrigating of the Tamarugal plain, the Pintados artesian wells, and the salt lagoons. The mining map of the departments of Vallenar and Freirina, Province of Atacama, has been completed. The iron mines in the department of Coquimbo, Province of La Serena, were studied by a Government commission and a map made of the same. The coal deposits of the Province of Arauco were investigated and maps made. In southern Chile the petroleum deposits were carefully studied, and experimental borings were made in the Carelmapu and Magallanes regions. In the Province of Tacna search was made for subterranean waters with the object of supplying the port of Arica with potable water. A mining map was drawn of the zone along the Longitudinal Railway between Calera and Pintados, and petroleum was prospected for in the region of Majala, Chipana, Cahuisa, and Huataconda, Province of Tarapacá.—In 1913 the CUSTOMS RECEIPTS of Chile amounted to 158,095,630.44 gold pesos and 2,017,245.86 paper pesos. (Gold peso equals \$0.365; paper peso, about \$0.20.) The customhouses at Antofagasta and Valdivia collected, respectively, during the year referred to, 38,245,739.66 gold pesos and 4,493,215.37 gold pesos.—A HYDROELECTRIC PLANT, estimated to cost about £2,000,000 (\$10,000,000), is to be installed at Tocopila near the port of Antofagasta. This plant will use the force of the waves to produce electric power. It is proposed to transmit electricity to the Chuquicamata mines to furnish power for smelting, refining, and other mining operations.—A recent decree issued by the Secretary of Industry of the Government of Chile provides for the establishment of a FISH-CULTURE STATION in the city of Lautaro.—It is estimated that there are 15,000,000 pesos invested in INDUSTRIAL ENTERPRISES in the Territory of Magallanes, which use annually more than 5,000,000 pesos of domestic products and purchase abroad more than 1,350,000 pesos of raw foreign products. These industries give annual employment to about 1,500 workmen who earn in wages about 2,000,000 pesos. The center of industrial activity in the Territory mentioned is Punta

Arenas, the southernmost city in the world. Among the large industries at this place are sawmills, shipyards, carriage manufactories, and cabinetmakers' shops, all of which represent a capital of about 2,000,000 pesos, and work up annually more than 700,000 pesos of domestic products and 150,000 pesos of imported products. These industries give employment to about 400 persons, who earn salaries amounting to 550,000 pesos per annum. The remainder of the inhabitants of Magallanes Territory are engaged in other occupations, including about 9,000 persons in the Territory who are interested in stock raising and who live in Tierra del Fuego and Patagonia.—

On December 21 last the sixteenth anniversary of the EDICT OF MILAN was commemorated in southern Chile by the unveiling, under the auspices of the Ecclesiastical Governor of the Territory of Magallanes, of a cross on the steep top of Cape Froward, which projects into the Strait of Magellan. The cross stands out in bold relief 365 meters above the level of the waters of the strait.—The year 1913 was a notable one in RAILWAY CONSTRUCTION in Chile. An aggregate of 1,186 kilometers were opened to traffic during the year. The total number of kilometers under construction amounted to 2,337, as follows: Arica to La Paz, 439 kilometers; Longitudinal Railway, 1,455; branches of 1.68 meter gauge, 194; branches of 1 meter gauge, 69; and branches of 0.60 meter gauge, 180. The total amount of railway work paid for in 1913 was, approximately, 78,300,000 pesos paper (\$15,660,000), over a million pesos of which was disbursed for wages.



In accordance with the law of August 20, 1913, a PRESIDENTIAL ELECTION was held on the second Sunday in February, 1914, the result of which was the election of Dr. José Vicente Concha president of the Republic for the constitutional period from August 7, 1914, to August 7, 1918.—The SYLLABIC WRITING MACHINE "Colombia," invented by Pedro Robles, a Colombia citizen, has given excellent trial results. This machine writes words, syllables, or letters as may be desired.—According to data published by the administrator of CUSTOMS at Cartagena, the receipts of that port in 1913 amounted to \$3,233,730.70, consisting of import duties, \$2,935,242.27, export duties, \$3,177.59, port dues, \$93,259.25; sanitary dues, \$2,990, 2 per cent for conversion, \$58,760.07, maritime salt deposits, \$66,733.26, and sundry receipts, \$73,568.26.—The Minister of Public Works has ordered printed a MAP of the national intendency of Choco.—The National Academy of Medicine and

Natural Sciences of Bogota celebrated on February 2 last the first CENTENARY of the birth of Dr. Andres Maria Pardo, a learned Colombian physician and founder of the National School of Medicine.

—The gross receipts of the municipal TRAMWAY of Bogota in 1913 amounted to \$230,916.17, the expenses to \$108,138.88, and the net receipts to \$122,777.29. The net receipts in 1911 and 1912 were \$92,372.13 and \$103,576.38, respectively.—Law No. 99 of 1913 prescribes the PAY FOR THE ARMY and provides for the construction of barracks. Law 100 authorizes the Executive to organize and maintain in the frontier territories of the Republic such a corps of soldiers and FRONTIER POLICE as he may deem necessary.—The National Government has appointed a board to cooperate in the selection of a STATUE in honor of one of the patriots of the War of Independence, General José María Cordoba, and in the designation of an artist to do the work.—A company was recently organized at Barranquilla to engage in the TRANSPORTATION of freight and passengers on the Cesar River, under the management of José A. Galofre.—The Government has contracted with the firm of Armstrong, Whitworth & Co. (Ltd.) of New Castle on Tyne, England, for the construction and delivery of THREE GASOLINE LAUNCHES. Each one will be 36 feet long, 8 feet beam, and 4 feet draft, with a speed of 8½ knots an hour; they are intended for service at the ports of Cartagena, Puerto Colombia, and Buenaventura, respectively. The price agreed upon was slightly over \$5,000 each.

—Gustavo Glauser, residing at Bogota, has secured from the Government of Colombia a contract for FOUR MOTOR LAUNCHES; they are to be constructed by Escher Wyes & Co., of Zurich, Switzerland, and the cost will be about \$4,500 each. Each launch is to be so constructed that it may be propelled by gasoline, oil, wood, or coal, and they are to be used on the Arauca and the Meta Rivers in Colombia.—THE SINU RIVER is to be canalized and its transportation facilities improved if a bill now before the Colombian Congress becomes a law. The expenses of such work are to be paid from the fluvial taxes collected on river traffic, and La Junta de Canalization del Sinu, at Lorica, Colombia (via Cartagena), will have charge of this important and extensive enterprise.—In 1913 the Amaga RAILWAY transported 792,920 passengers, 7,819 animals, and 21,875,914 kilos of freight. This railway has 29 kilometers open to traffic.—The governor of the department of Bolivar has appointed a committee composed of Drs. Rafael Calvo C., Manuel F. Obregon, A. R. Blanco, T. A. Tatis, Manuel Pajaro H., C. S. Delgado, and M. A. Lebgua to prepare the preliminary work of the third NATIONAL MEDICAL CONGRESS which will meet in Cartagena on November 11, 1915.—On February 11 the first WIRELESS message between Cartagena and Sayville, N. Y., was exchanged in the presence of the governor, invited guests, and members of the press.—

The gross receipts of the Zipaquira SALT MINES in 1913 amounted to \$620,221.24, or \$50,903.94 more than in 1912. The cost of operation in 1912 was \$55,351.63, and in 1913, \$36,545.75.



COSTA RICA

The COFFEE crop of the Republic of Costa Rica in 1913 consisted of 205,541 sacks, as compared with 196,211 sacks in 1912. The largest crop of coffee ever grown in the Republic was that of 1898, which aggregated 356,009 sacks. The number of coffee trees in Costa Rica in 1913 was 11,170,812, as compared with 10,647,702 in 1912.—COAL MINES have been denounced at Lagunilla de Vitey, Talamanca, and at Monte del Aguacate, San Mateo. These mines are reported to have extensive deposits of a fine quality of coal.—A contract has been made with Hopkins & Orlich to furnish the municipality of Atenas with ELECTRIC light and power. The duration of the contract is for a term of 16 years.—Part of the reenforced concrete WHARF which is being constructed at Puntarenas has been opened to public service. This wharf is a substantial piece of iron and masonry work and is practically indestructible.—The Commercial BANK of Costa Rica has been authorized to place in circulation bank bills of the denomination of 20 colones to the amount of 100,000 colones. The bank will retire bank notes of other denominations aggregating an equal amount.—The MODERN THEATER Co. has been incorporated at San Jose with a capital of 50,000 colones. Francisco Aguilar Barquero is president of the company.—The City of Puntarenas proposes to celebrate in July next the inauguration of the new WATERWORKS which will give the municipality an abundant supply of potable water piped into the city from the neighboring hills. For a number of years the question of an adequate supply of potable water has been agitated at Puntarenas, and the completion of the reservoirs and conduits is to be observed with appropriate ceremonies.—The MUNICIPAL BUILDING at Alajuela has been completed, the official inauguration taking place at the close of last year, and the offices of the provincial government have been transferred to the new quarters.—At the STOCK FAIR recently held at Heredia 300 head of fine breeding cattle were sold to stock raisers and farmers in the vicinity. Reports from the fair and from stock-growing communities show that there is a marked tendency in Costa Rica to improve the grade of the live stock raised in the Republic.—In 1914 there were 414 PUBLIC SCHOOLS in operation in Costa

Rica, 36 of which belonged to grade I, 63 to grade II, and 315 to grade III. There were 30 schools for boys, 30 for girls, and 354 mixed schools. Bids were recently received by the Government for the construction of 29 school buildings on or before May 1 of the present year, and plans for the erection of 85 more school buildings are under consideration. In 1913 a contract was awarded to the English Construction Co. for the erection of school buildings in Heredia and Cartago at a cost of £10,160 and £18,000, respectively.—The contributions of the Atlantic and Pacific Railways for HOSPITAL purposes in December, 1913, amounted to 5,100 colones, distributed among the hospitals at San Jose, Cartago, Alajuela, Heredia, Limon, Liberia, and Puntarenas.—THEATERS are being built at Heredia and Puntarenas. The theater at the former place will be ready for use in March, and that at Puntarena in May of the present year.—The centenary of the birth of JUAN RAFAEL MORA was celebrated in Costa Rica on February 20, 1914. One of the features of the celebration was the compilation and printing of a book of biographic data concerning Mora and official documents relating to the campaign in which he took such a prominent part.—The Second CONGRESS OF CENTRAL AMERICAN WORKMEN was inaugurated at San Jose on February 20, 1914. The First Congress was held in San Salvador in November, 1911.



The National Congress has appropriated \$250,000 to meet the expenses of the CUBAN EXHIBIT at the Panama-Pacific Exposition, which will be held in San Francisco in 1915.—The Cuban TELEPHONE company has been granted until March 10, 1915, to complete the installation of long-distance telephone lines constructed in accordance with an executive decree of September 10, 1909.—The Isle of Pines AGRICULTURAL FAIR, which was held at Santa Fe during the second week of February of the present year, was a great success. Exhibits of fruits, vegetable and other products showed wonderful development in that part of Cuba during the past few years. The Government distributed cash prizes, varying from \$10 to \$30 each, aggregating \$800.—The contract awarding the underwriting of \$10,000,000 in BONDS to J. P. Morgan & Co., at 94 per cent of their face value, was signed in Habana on January 31 last. Clause 2 of the agreement obligates the Government to set aside 10 per cent of the customs receipts, or such additional sum from

customs or other revenues as may be necessary to liquidate the loan within the term agreed upon.—The President of the Republic has been authorized to expend \$220,000 in repairing and constructing ROADS, streets, etc., in the Province of Matanzas.—A triweekly MAIL service has been established between the mainland of Cuba and the Isle of Pines.—The board of directors of the National THEATER has asked for bids to reconstruct the old building. Funds are available to the amount of \$100,000.—A bill has been introduced into Congress authorizing the President to contract for the construction of the Santa Clara AQUEDUCT. Estimates are to be received until 45 days after the bill becomes a law.—The "Banco de Fomento Agrario," an agricultural BANK of Habana, paid a dividend of 12 per cent in 1913.—The denouncement of PETROLEUM claims in the vicinity of Habana continues unabated. John Roger recently made denouncements of 52 claims covering gas, asphalt, and petroleum deposits.—On the recommendation of the mayor the city council of Habana has appropriated \$280,000 for a HOSPITAL to be constructed and supported by the city.—A new issue of POSTAGE STAMPS is being prepared in Habana for the Cuban Government.—Work on the presidential PALACE, which was temporarily suspended more than a month ago on account of a strike, has again been resumed.—A statue is to be erected in the patio or interior court of the Department of Sanitation of the Government of Cuba at Habana in honor of Dr. Carlos J. Finlay, the celebrated CUBAN PHYSICIAN who discovered the transmission of yellow fever by means of the mosquito. Funds for the erection of the statue will be contributed by scientific and medical societies of Cuba and by admirers of the late Dr. Finlay.—The most powerful LIGHTHOUSE in the Republic of Cuba is to be erected at the entrance of Santiago Bay by the Department of Public Works. The tower will be 84.3 meters above sea level.—A plan has been submitted to the Cuban Congress for the establishment of a SANITARIUM for consumptives at the port of Boniato.—On February 24, 1914, the Cuban people celebrated the revolution begun on February 24, 1895, for Cuban INDEPENDENCE, the day being observed throughout the island as a public holiday.—The foreign and domestic commerce of Cuba will be greatly benefited by the NEW DOCKS AT HABANA, the concession for which was granted to the late Sylvester Scovel, a United States citizen, in 1905. After nine years' labor the second dock is about completed, and the present owner of the original concession is the Port of Habana Docks Co., a corporation formed in the United States, but composed also of English, Belgian, and Cuban stockholders. About 75 per cent of the importations of Cuba enter at Habana, and until comparatively recently this tonnage was handled by lighterage, a fact that often

caused serious delay and even loss of goods.—The Cuban SUGAR OUTPUT for 1913 was estimated at 2,429,240 tons, an advance of 535,553 tons over that of the previous year. The amount exported was valued at about \$93,000,000, of which the United States purchased more than \$78,000,000 worth. Of all CLASSES OF PRODUCTS Cuba sent to the United States last year \$107,640,332. Of this amount cigars were valued at \$3,927,779; iron ore, \$4,805,457; molasses, \$1,150,580; leaf tobacco, \$13,890,501; pineapples, \$1,024,323.

DOMINICAN REPUBLIC

A law has been promulgated by the President of the Dominican Republic providing for the establishment in the department of agriculture and immigration of the Federal Government in the city of Santo Domingo of a permanent EXHIBIT of the export products of the country. Among the articles on exhibition will be samples of cacao, classified and labeled and mentioning the parts of the Republic from which the samples came. There will also be samples of tobacco and coffee labeled in a manner similar to the samples of cacao. Samples of sugar and cotton will be duly classified, and samples of textiles are to be graded according to classes, and points of origin are to be stated. There will also be classified collections and samples of honey, resins, construction, dye and precious woods, and a complete exhibit of the minerals of the Republic. The exhibit will be under the supervision of a director, one of whose duties is to send complete sets of samples of the principal articles mentioned in the foregoing to the consular offices of the Dominican Republic abroad, giving prices, interesting data, and full information concerning the products referred to. The office of the permanent exhibit in the city of Santo Domingo will keep in touch with plantation owners, agriculturists, apiculturists, stockmen, and other persons engaged in different branches of agriculture in the Republic for the purpose of collecting information as to methods of cultivation, improvements, prices, etc.— The Seeberg Steamship Co. has established a line of MERCANTILE VESSELS to ply between the ports of Mobile, Ala., Monte Christy, Puerto Plata, Samana, Sanchez, La Romana, San Pedro de Macoris, and Santo Domingo.—The customhouse at Puerto Plata collected in December, 1913, CUSTOMS REVENUES amounting to \$135,582.51. The total customs receipts of the Dominican Republic in 1913 aggregated \$4,260,137.24.—According to the "Listin Diario," a daily newspaper of the city of Santo Domingo, the Dominican Republic had at the beginning of 1914 the sum of \$4,500,000 on

deposit with the Morton Trust Co. of New York, about \$2,000,000 of which it is planned to use during the present year in the construction of public works.—The National BANK of Santo Domingo has an authorized capital of \$2,000,000. The savings department of this bank pays interest at the rate of 4 per cent per annum, compounded quarterly.—The Colon THEATER was recently inaugurated at San Pedro de Macoris, and Independencia Theater in the city of Santo Domingo.—According to press reports the city council of the municipality of Santo Domingo has made a new contract for the installation of an ELECTRIC light plant in the Federal capital.—Gold, copper, iron, and sulphur MINES have been denounced in the Province of Santo Domingo by De Pool and Rodriguez.—Dr. Armando Aybar has been appointed MINISTER of the Dominican Republic near the Government of Haiti at Port au Prince.

ECUADOR

The First Ecuadorian MEDICAL CONGRESS will meet in the city of Guayaquil from the 9th to the 16th of October, 1914. The Congress will be held under the auspices of the municipal council of Guayaquil. Propaganda committees have been appointed to complete the work of organization in different parts of the Republic, and no effort is being spared to make the Congress a notable and useful gathering of the medical profession of Ecuador.—The full Spanish text of the contract made by the Government of Ecuador with J. G. White & Co., of London, for the SANITATION of Guayaquil is published in "El Grito del Pueblo Ecuatoriano" of December 18, 1913. The first work undertaken in the sanitation of the city will be the furnishing to Guayaquil of an abundant supply of potable water.—A contract has been made by the Government of Ecuador with a German firm for the survey and construction of a RAILWAY from Huigra to Cuenca.—Dr. Abelardo Carrera Andrade has been appointed CHIEF JUSTICE of the Supreme Court of Ecuador at Quito.—August Christensench, who is engaged in the fishery industry in Southern Chile under concessions of the Chilean Government, has petitioned the Government of Ecuador for permission to FISH FOR WHALES off the coasts of Ballenita and Machalilla, and in the waters in the vicinity of the Galapagos Islands.—The WIRELESS station now being installed at the fort on Santa Ana Hill, near the city of Guayaquil, is equipped for long-distance service.—The Government of Chile has granted to Ecuadorian students four SCHOLARSHIPS in the normal school at Santiago. These students are to take up their studies at the beginning of the school year

early in March, 1914.—In 1913 there were in the Republic of Ecuador 1,412 schools, 1,320 of which were Federal and municipal schools and 92 private schools. The total registration of these schools was 87,020 pupils of both sexes. The average number of pupils taught by each teacher was 24, and the funds available for the maintenance of public primary schools were 1,141,444 sucre (\$570,722).—Experiments are being made in COTTON GROWING in the State of Manabi. Large areas of Manabi have the appearance of desert lands, due to the lack of rainfall. Mr. Ernesto Pini planted cotton on lands of this kind hitherto considered unproductive unless irrigated. He was rewarded by an abundant yield of cotton of a superior fiber, attributing the result to modern methods of cultivation and the making available of the film water of the soil for the use of the plants. Much of this supposed barren land is said to be underlaid by free water, and where the dust mulch is used and proper methods pursued sufficient moisture is obtainable to germinate and grow crops by making the water already in the soil available to plant life. These experiments show that there are large tracts of fertile lands in the State of Manabi which can be used to advantage in growing cotton and other crops without depending on rainfall or resorting to irrigation.—The WIRELESS telegraph committee of the Government of Ecuador has recommended the establishment and maintenance of long-distance stations at Quito, Guayaquil, and Galapagos, and that smaller stations be installed at Esmeraldas, Bahia, Puerto Bolivar, Manta, and Santa Elena.—A law has been passed providing for the SEWERING AND PAVING of the city of Portoviejo by contract approved by the department of public works.—Rules and regulations promulgated on December 23, 1913, regulate the collection of the tax on ALCOHOL on and after January 1, 1914.—During 1913 CACAO BEANS to the amount of 85,908,495 pounds were delivered at the port of Guayaquil from the producing districts, as compared with 72,892,014 pounds in 1912. The quantity delivered at other ports of the country is comparatively small. The value of the 1913 crop is placed at \$7,452,304, as compared with \$7,025,736 for 1912.



The budget of general expenses of the Government of Guatemala has been modified so as to make the appropriation for the BOYS INSTITUTE AND PRACTICAL SCHOOL OF COMMERCE at Quezaltenango 8,343 pesos (\$3,670) for the 10 months of the school year ending in 1914. This amount is to be used in paying the sal-

aries of a director, assistant director, other officers, professors, and employees of the school. The commercial department of the institute pays particular attention to the teaching of foreign languages, especially of the English language, as well as to instruction in mathematics, bookkeeping, typewriting, and stenography. The manual training department gives practical and theoretical instruction in blacksmithing, carpentry work, printing, weaving, and bookbinding, employing a corps of five expert instructors in these different branches. In addition to special instruction in the branches already mentioned, attention is given to imparting knowledge along numerous other lines necessary for the proper equipment for the education of business men and artisans, such, for instance, as the study of Spanish grammar, history, geography, botany, chemistry, zoology, geology, drawing, etc.—The CONSULATE of Guatemala in Berlin has been made a Consulate General, and Jorge Guillermo Abel, formerly consul at that place, has been promoted to the rank of consul general.—A philanthropic group of Guatemalan ladies has presented to the National HOSPITAL in the City of Guatemala the necessary ground upon which to construct a suitable building to be used as a home for indigent aged persons of both sexes and for invalids.—The Government has authorized the holding of an annual FAIR at Tumbador, department of San Marcos, and at Agua Blanca, department of Jutiapa.—DEPUTIES have been elected to the National Legislative Assembly for the renewal of half the members of that body. These deputies entered upon their duties on March 15 for a period of four years, as provided for in the Constitution.—The Government of Guatemala has contributed \$2,000 to a fund donated by the Latin American countries to be used in the erection of a MONUMENT on the banks of the Panama Canal in memory of Vasco Núñez de Balboa, discoverer of the Pacific Ocean.—The Republic of Guatemala was represented at the Second International Conference for the formation of a MAP of the world by Jose Maria Lardizabal. The conference met in Paris on December 10, 1913.—The Government of Guatemala has been invited to participate in the Fifth International Congress of PISCICULTURE to be held in Valencia in May, 1914, and has appointed as its delegate to said Congress Carlos Soler y Arcial.—A BOARD OF AGRICULTURE has been organized in Suchitepéquez, department of the same name. Belisario Jerez is chairman of the board and Leonardo Quintana secretary.—Lic. Manuel Cabral, a learned Guatemalan jurist and CHIEF JUSTICE of the Supreme Court of the Republic, died on January 13 last.—The STEAMSHIP SERVICE, which had been temporarily suspended by the United Fruit Co. between Guatemalan ports and Limon, has again been resumed. A direct service by La Veloce Co. between Mediterranean ports and New Orleans, and by transfer to the United

Fruit Co.'s steamers with Guatemala, will be inaugurated in April next.—A supply of POTABLE WATER has been provided for the town of Estrada Cabrera, department of Suchitepéquez.—A large SCHOOL BUILDING, the third in size in the Republic, has been completed at Huehuetenango. A kindergarten has also been opened at the same place.

HAITI

To fittingly celebrate the assumption of power by President Oreste Zomar, who was elected to that office by the National Assembly early in February, a special TE DEUM SERVICE was solemnized in the Metropolitan Church at Port au Prince. After the services a reception was held at the Dessalines Barracks.—M. Alexandre Moise has been elected president of the COURT OF ACCOUNTS to serve until July 27, 1914, thus completing the unexpired term of M. Emile Elie.—On February 12 an interesting FOOTBALL GAME was played in Leconte Park, Port au Prince, between an eleven from the sailors of the French warship *Conde*, and a picked team of players from the various athletic clubs at the capital.—President Zamor has appointed M. Drossaint Lilavois DIRECTOR GENERAL OF POSTS. This is the third time that M. Lilavois has held this important and responsible position.—On February the electoral college of the city of Port au Prince, under the presidency of M. J. B. U. Errié, elected the following CANDIDATES for the SENATE, MM. Luxembourg Cauvin, Horatius Baussan, Julien Dusseck, J. B. U. Errié, Rémy Bastien, and Claudius Gauthier.

HONDURAS

President F. Bertrand in his MESSAGE to the National Congress on January 1 of the present year reviewed the work of his administration during 1913. Referring to the schools of the country the Executive states that public instruction has received the particular attention of the Government, and special efforts have been made toward the betterment of rural schools, the number of which was increased during the year. The Government has also encouraged in every way possible the development of agriculture and stock raising, manufactures, and mining, and has fostered the building and improvement of roads and the construction of public works. Great activity was shown in

the banana industry on the northern coast of the Republic in 1913. The area of banana lands under cultivation and the exports of bananas are steadily increasing. In the opening and improvement of public roads the Government expended 209,586 pesos (\$91,170) during the past year, and had on hand at the beginning of 1914 a fund for road improvements amounting to 128,505 pesos (\$55,900). Among the important works concluded in 1913 was the construction of the Puerto Cortes wharf at a cost of 96,256 pesos (\$41,871). During the economic year 1912-13 the net revenues of the Government were 5,207,232.10 pesos (\$2,265,146).—Federico Girbal has contracted with the Government of Honduras, subject to the approval of Congress, to cut and export CEDAR AND MAHOGANY logs for a period of 10 years from lands lying between the Aguan, Negro, and Patuca Rivers and their tributaries, and from lands between the Platano, Payas, and Secri Rivers and their tributaries.—The Honduras Oil Co. recently discovered indications of PETROLEUM near the Guare River. Experts who have examined the neighborhood calculate that a petroleum deposit exists at a depth of about 1,800 feet and recommend the boring of wells.—In February, 1913, the Republic of Honduras had 241 kilometers of constructed RAILWAYS, as follows: La Ceiba to Masica, 96 kilometers; Puerto Cortes to Pimienta, 90 kilometers; the Cuyamel Fruit Co.'s line, 20 kilometers; the United Fruit Co., 20 kilometers; the Palmas Plantation Co., 8 kilometers and the Tela Fruit Co., 7 kilometers. On the date referred to the following proposed lines were under consideration: Dr. Virgil C. Reynold's concession to Nueva Arminia; the Tela R. R. Co. from Puerto Sal to Laguna de los Micos, 6 miles; and the E. P. Morse Timber Co. from Omoa to the Chamelecon valley. Concessions have been granted for the following lines: The Alcerro & Rolston line from the Bay of Tela to El Progreso; the Alcerro & Glynn line from Trujillo Bay to Juticalpa; and 70 miles of the Pan-American line (R. Keilhauer).—A contract has been made with Carlos F. Alberti to erect in Tegucigalpa a MONUMENT in honor of Gen. Manuel Bonilla at a cost of 11,500 pesos. A bust of Gen. Bonilla has been placed in Amapala Park, Amapala.—The Honduras ANTHENEUM, which was organized about two years ago at Tegucigalpa, has a membership of 80 and is in a flourishing condition.—An AQUEDUCT which will supply the town of Guanaja with an abundant supply of potable water has been opened to public service.—There are 31 Honduran STUDENTS studying abroad at the expense of the State. Of this number 14 are in the United States, 5 in Guatemala, 1 in Nicaragua, 1 in Switzerland, 6 in Mexico, 2 in Salvador, and 2 in England.—The Government of Honduras has contracted with Carlos Zúñiga Figueroa to make 34 life-size OIL PAINTINGS OF THE PRESIDENTS of Central America and of Honduras. These paintings are

to take the place of those now on exhibition in the Hall of Portraits in the National Palace at Tegucigalpa.—The Honduran Co., a MINING corporation organized under the laws of the State of Florida with headquarters at Tampa, has been recognized by the Government of Honduras as a juridic entity.



The gross revenues of the NATIONAL RAILWAYS of Mexico during the last half of 1913 were 17,482,469 pesos. The expenses of operation were 16,527,787 pesos (Mexican peso equals \$0.498).—The FOREIGN COMMERCE of Mexico during the first four months of the fiscal year 1913–14 (July to October, 1913, inclusive) amounted to 145,080,028.14 pesos, consisting of imports 60,272,471.06 pesos and exports 84,807,557.08 pesos. The United States participated in the import trade to the extent of 26,643,441 pesos and in the export trade 64,921,202 pesos.—Nineteen of the principal MINING COMPANIES of the Republic of Mexico which continued operations in 1913 paid during that year 8,139,500 pesos in dividends. Three of these companies, namely, La Blanca, Peñoles, and Dos Estrellas, paid 7,008,000 pesos in dividends during the year referred to.—The exports of HENEQUEN in 1913 amounted to 875,997 bales, as compared with 855,366 bales in 1912, 713,008 in 1911, 582,142 in 1910, and 587,846 in 1909.—The Mexican NAVIGATION Co. has transferred the majority of its shares to the Ward Line, the latter taking over the business of the former at Mexican Gulf ports.—On January 8, 1914, an issue of 25,000,000 pesos in 6 per cent BONDS of the interior public debt was authorized by the Mexican Congress, as was likewise the purchase and control of the Mexican National Packing Co. (Ltd.).—At the close of 1913 the RAILWAY system of Yucatan consisted of 904 kilometers, representing an investment of £825,000.—The department of communications of the Provisional Government of Mexico, acting under contracts approved by Congress, has authorized the "Compagnie Generale de Chemins de Fer Secondaires," of Brussels, to construct 5,000 kilometers of railways in the Republic at points to be decided upon at a later date.—The department of public instruction has issued rules and regulations governing the National MUSEUM of Archaeology for 1914. Among the duties of the museum will be to collect, preserve, and exhibit objects relating to the archaeology, history, and ethnology of the country, and to disseminate information on these subjects by means of investigations, lectures, and publications.—The First Mexican DENTAL CONGRESS, which met in the City of Mexico on January 26, 1914,

had an attendance of 120 members and delegates. Dr. José J. Rojo was elected president of the congress. More than 45 papers were ready for presentation on the date of the assembling of the congress.—An executive decree of January 21, 1914, permits the free importation of MAIZE into Yucatan through the customhouses at Ascension and Chetumal from January 21 to June 30 of the present year.—The MILITARY PREPARATORY SCHOOL at Tlalpan, a suburb of the City of Mexico, had an enrollment of 290 pupils at the beginning of the semester on January 15 last.—A decree of January 12, 1914, suspends for six months the SERVICE OF THE NATIONAL DEBT, and provides that customhouse duties shall be paid in cash at the different Federal customhouses.—The department of communications of the Government of Mexico has called for bids for the establishment of a STEAMSHIP SERVICE in the Gulf of California between Guaymas and Perihuete. The bids are to be opened in the City of Mexico on May 11, 1914.—The department of communications and public works has authorized the Cananea Consolidated Copper Co. to build and exploit for a term of 99 years from April 7, 1904, a RAILWAY from Del Rio, a station on the Naco to Cananea Railroad, or from some point near Del Rio, to within 20 or 30 kilometers of the boundary line between Mexico and the United States in the States of Chihuahua and Sonora. Authorization is also given to build a railway which will connect the Naco to Cananea Railway with the Sonora Railway. The concessionaire must build at least 50 kilometers of these railways by November 25, 1915, and both lines are to be completed by November 25, 1920.—



NICARAGUA

On January 25, 1914, a society was organized in the city of Managua under the name of "The Nicaraguan ACADEMY OF MEDICINE," the object of which is to promote the interests of the medical profession in Nicaragua, regulate fees, establish a library, and publish a medical review. The organization comprises the principal physicians and surgeons of Managua, and steps have been taken to extend the organization throughout the Republic.—The Congress of Nicaragua has passed the 1913 DEFICIENCY BILL. The bill appropriates \$50,000 to cover the deficiency in the budget for the last fiscal year and \$5,000 for the payment of fees for the sale of articles monopolized by the Government, such as aguardiente, tobacco, etc.—The Supreme Court of Nicaragua has declared unconstitutional the law providing for temporary concessions of MINING ZONES.—The American of Bluefields states that the deal for the option lease of

the Bonanza and Mars group of MINES has become effective, and that the properties in 1914, or until the expiration of the lease, will be entirely under the control of the leasing syndicate. Options have also been given for the lease of the Siempre Viva, Lone Star, Concordia, Constancia, and Colonia mines, and it is reported quite probable that all these mines will be purchased by the syndicate. The mines are to be operated on an extensive scale, and as adequate transportation facilities have been provided for shipping in supplies and carrying out the products of the mines, the whole district will greatly benefit.—The Supreme Court has appointed the following ASSOCIATE JUDGES for 1914: Alejandro Cortez, Alejandro Falla, Enoc Aguado, Francisco Buitrago Diaz, Helidoro Moreira, Joaquin Vigil, Juan Manuel Arce, José Dolores Lola, Maximo H. Zepeda, Modesto Barrios, Ramon Castillo, and Teodoro Delgadillo.—Reports from the town of Siuna state that the Potosi group of MINES has recently encountered a large lode of ore assaying \$20 gold per ton. The ores from these mines, taken from levels 15 feet above the new lode, assay \$8 per ton.—The municipality of Bluefields, in order to reduce to a minimum the occurrence of fires in the business section of the city, has passed an ordinance requiring new buildings to be constructed of brick or cement. If wooden walls are used they are required to be filled with clay or cement, and the fillings must be supported by wire instead of wooden rails. The municipal council has adopted resolutions requiring all plans for buildings to be approved by the mayor, upon the recommendation of the city's architect, and allowing imports free of municipal duties of non-combustible building materials for use in the municipality. These and other resolutions adopted by the council are subject to the approval of the federal Government before becoming operative.—The administration of CUSTOMS of the Government of Nicaragua has issued circular No. 39, addressed to collectors of customs, under date of Managua, December 18, 1913, reading as follows: "In consideration of the fact that with the new methods established for keeping accounts of the merchandise which enters the customs warehouses, the registry of marks and countermarks, as prescribed by article 118 of the General Regulations of Customhouses and Ports, is not indispensable for the proper administration of the customs, and in view of the numerous protests, which are considered well founded, received from importers against the said disposition of the regulations, you will please, until it is decided to the contrary, not impose the fines fixed for lack of registry of the marks and countermarks, except for absolute lack of marks. The fines already imposed or collected for the said lack of registry shall be returned to the interested parties by this office on a written request presented within three months of the date that the fines may have been imposed or collected."—By the provisions of a Nicaraguan law of November

10, 1913, the Executive is authorized to order the payment of DUTY ON IMPORTS in general at the rate of \$0.80 gold for each peso prescribed by the tariff, instead of \$0.60 as provided by the decree of March 17, 1913. This increase, which amounts to one-third of the rates payable at present, is not to apply to sugar, flour, common soap, or plain cotton cloth. The purpose of the law is to provide funds for the conversion of the internal debt. The law provides also for an internal tax of 1.5 centavos per kilo (\$0.68 per 100 pounds) on refined sugar of domestic origin.



The Republic of Panama, through the Department of Fomento (Promotion) of the Panaman Government, has contracted with R. W. Hebard & Co. for the construction of 51 miles of RAILWAY in the Province of Chiriqui in the extreme west of the country at an estimated maximum cost of \$1,600,000. The plan shows the line to be divided into two sections, one of which, 23 miles long, comprises the railway between the Pacific coast town of Pedregal and La Concepcion, via David, and the other section, 28 miles in length, is to be an extension from David to Boquete. The Concepcion section of the railway passes through the Bugaba district of Panama, one of the most fertile parts of the Isthmus, and a region capable of producing immense quantities of tropical products. Boquete, the terminal of the David extension, is in the beautiful valley of the Caldera River at an elevation of 4,000 feet above the level of the sea. This valley and the surrounding country is noted for its excellent coffee, experts pronouncing the quality of the coffee produced in this region equal to any coffee grown in Central America. Under the terms of the contract the rails used in the construction of the line may be bought of the Panama Canal Commission if it should be deemed desirable to do so. The construction of the railway will be under the maximum cost system, and a percentage will be allowed on the difference between the maximum estimate made by the engineers and the actual cost of construction. The contractors are to receive bonds issued by the Government of Panama in payment for the building of the line. The work of construction is to be commenced on or before April 4, 1914—that is to say, within 60 days from the date of the signing of the contract. The building of the road is expressly authorized by a law recently passed by Congress. The construction of this railway will develop the Province of Chiriqui, a region which possesses a variety of climates and is one of the most fertile, salubrious, and

promising of the Republic. Already agricultural immigrants are beginning to settle in considerable numbers in this Province.—A law has been promulgated providing for the establishment of OFFICIAL WAREHOUSES at the principal ports of the Republic for use in storing merchandise imported and held on deposit awaiting the payment of duties. The charge for all kinds of merchandise deposited in these warehouses, except explosives, is 25 cents per 100 kilos per month. The charge for explosives is 50 cents per 100 kilos per week. Under this law private parties may receive permission from the Government to erect private warehouses in the larger ports.—The United States Government has accepted the invitation of the Government of Panama to participate in the EXPOSITION to be held in the city of Panama in 1915 in honor of the opening of the Panama Canal, and has signified its intention to spend \$100,000 in the celebration.—A thoroughly modern and sanitary STEAM LAUNDRY has been established in the city of Colon. This laundry is under the management of the Consumers' Electric Light & Refrigerating Co., of Colon.—It is stated that the Government intends to replace Santo Tomas Hospital with a MODERN HOSPITAL, to be erected on a part of the exposition grounds, sufficient distance from the noise of traffic and the exposition proper to insure quiet to patients. The Bolivar Asylum is to be also removed to the same locality and placed in a new and commodious building.—A new SUBURBAN DEVELOPMENT is proposed near Panama city, the first step in which will be the erection of a modern country club-house, with attached tennis, golf, and a bowling green.



PARAGUAY

In the general resumé of the progress of the REPUBLIC DURING 1913 El Diario of Asuncion for December 31 publishes a lengthy statement covering many lines of commercial and industrial activity. Notable progress was made, and the public works projected and also those under construction are given as very satisfactory.—The BOY SCOUT MOVEMENT has been launched in Asuncion and a large number of boys have enrolled their names and taken up the work under the various instructors. Leading citizens assisted in the organization of the corps, and it is believed that in Paraguay, as in other lands, such a movement means much to the young manhood and, of course, to the future of the country.—The Government of Paraguay has been invited by Argentina to participate in the second International AGRICULTURAL CONFERENCE, which will be

held in Buenos Aires in 1916. This meeting will bring together many specialists and practical workers from many countries and it is believed that great agricultural advancement will follow the conference.—An AGRICULTURAL SCHOOL is being established at Ypacarai, and in beginning the work two competent instructors will have charge of the several courses. These gentlemen have been educated abroad and bring to their work modern methods of instruction. As the school grows in number of students and in importance other specialists will be added to the faculty as the needs require.—The EXPORTATION OF ORANGES from Paraguay to Argentina and other countries has shown much activity in recent years. In 1910, 1911, and 1912 nearly 400,000,000 were shipped from Asuncion; also during the same period more than 8,000,000 mandarins were exported. As new capital is introduced and virgin areas opened to cultivation the production of fruits of this and other varieties promises great activity.—The PROPOSED "HOMESTEAD" law has been passed by the House of Deputies and now awaits action in the Senate, where it is believed similar favor will be accorded the bill. Such a bill has various clauses that will attract settlers to Paraguay who will add materially to the development of the agricultural resources.—The first year of JUTE GROWING in Paraguay proved very successful and the enterprise will consequently be greatly developed during the next few years. The seed sowing was done broadcast in well prepared soil and the good results were really more than expected for the first year. Later the manufacture of fiber may prove another industry for the country, but for the present the raw product will be shipped elsewhere for manufacturing purposes.—The Paraguayan Director of Customs has asked for authority to build NEW QUAYS in the port of Asuncion and to install two electric cranes of 3 tons each.—The Government has forwarded to Congress a project of law authorizing the Paraguay Central Railway Co. TO CONSTRUCT A PORT at Santisima Trinidad, on the River Paraguay, to facilitate the embarkation of large quantities of timber.



In June, 1914, Peru proposes to hold an international SUGAR CONGRESS, which will bring together specialists from a number of countries who will discuss the many phases of sugar production. Circulars have been sent from Lima outlining the tentative program. Señor Don C. Gutierrez Madueño is president, and as colaborers a

number of the most prominent men of Peru have been named. A dozen cities and towns of the Republic have selected delegates to attend the congress, the majority of whom are engineers or persons interested in the production of sugar.—The report of the director of the MILITARY SCHOOL at Chorillos for the year 1913 shows much progress and successful work since the institution was reorganized a year ago. There are now five divisions, which give instruction in all branches of military science from that of the officer to the cooks and other employees of the army.—El Banco Municipal de Lima is the name of a NEW BANKING INSTITUTION which is to be established in the Peruvian capital, and for which 32 leading financiers and citizens subscribed their names. Officials from this list will be selected to carry on the business of the new bank; it will be centrally located, and the founders believe that a large field lies before the new institution. About \$100,000 will be raised for starting operations.—The city of Lima is to have another EQUESTRIAN STATUE of a famous warrior. Gen. San Martin, whose Argentina victories as well as those in Chile and Peru endear his memory to all lovers of liberty, will be represented astride a magnificent steed in the act of overlooking a field of battle. The work is by the famous sculptor, Mariano Benlliure, and it is hoped that it will be completed and ready for erection in June or July next.—A NEW SCHOOL is to be established at Puno, the Peruvian port on Lake Titicaca, for youths from 6 to 14 years of age. The work, besides being of a primary character, will be most practical and the aim will be to develop the mechanical and agricultural talent of the native children, so that they may become useful in mining, agricultural, and other lines which are developing this section of the Republic.—Peruvian capitalists are preparing to exploit the SULPHATE AND NITRATE of potash fields recently discovered in the Department of La Libertad. It is known that the deposits are large, covering something like 500 hectares in area. The analyses indicate more than 8 per cent of matter that may be profitably worked.—According to the report of Dr. Bosworth, the geologist of the British Government who has investigated the PETROLEUM DEPOSITS of Peru, the latter are declared to be among the most important deposits of petroleum in the world. These exist in the Negritos, La Brea, and Lobitos sections of the country.—The area in which SUGAR CANE was grown in 1912 covered about 37,129 hectares, and nearly 20,000 laborers were employed in working the crop. The product for 1912 was worked in 38 refineries and produced 192,754 tons of sugar and 9,101,525 liters of alcohol. The cane output was far in excess of the crop of the previous year.



SALVADOR

A NEW SCHOOL will be soon established at San Salvador, to be known as the Escuela Normal de Verones. The head of the institution will be a German, whom the consul of Salvador in Hamburg has engaged and who will arrive in San Salvador at an early date.— The consul of Salvador in New York, Don Jose Alfaro Moran, has supplied the MONTHLY BULLETIN with a report showing the EXPORTATION OF MERCHANDISE to Salvador from the port of New York during the year 1913. The total value of all goods is given as \$1,938,160.85. Of this sum \$309,174.75 were railway supplies; \$277,894.36 various cotton goods; machinery, \$119,866.34; druggists' supplies, \$117,872.95; typewriters, \$15,975.30; printing paper, etc., \$46,648.84.— During the month of November last Salvador sent to San Francisco, Cal., 1,013 SACKS OF COFFEE, which found a ready sale in that market. The Salvadorean producers believe that a much larger market will be developed between Salvador and California.— Within a short time Salvador is to have a SEISMOLOGICAL OBSERVATORY. Dr. Santiago I. Barberena, director of the National Observatory, who recently visited Europe, was commissioned by the President to visit the institutions of the various countries and investigate the most modern instruments and appliances for seismological work. This has resulted in the purchase of an outfit, which will be installed in a building soon to be erected south of the Finca Modelo, at San Salvador. This institution will form a link in the numerous observatories of similar nature that extend from California to Chile, and which in past years have done much to add scientific data about earthquakes.— The classes of the NATIONAL UNIVERSITY opened in January last, and the occasion brought together many prominent people, and numerous addresses were delivered. A large number of students began or resumed their studies, and the institution starts the year with most flattering prospects, both in attendance and in teaching talent.— Senor Don Vizcarrondo Rojas visited Salvador for the purpose of securing data for his forthcoming COMMERCIAL GUIDE for the years 1914-15. This work will be extensive and will largely cover Central American countries, as well as many islands of the Caribbean. It will be printed in English and Spanish.— The PUBLIC PARK in La Libertad, which has been under construction for some months and work upon which was interrupted by heavy rains, will, it is believed, be completed by the end of the present year. The building of this fine park has caused adjacent

property to advance in value, and other improvements are likely to follow.—The large number of advertisements of MANUFACTURED PRODUCTS from the United States that fill many columns of Salvador newspapers indicate that traveling salesmen are actively working this long-neglected field.—San Salvador is mourning the loss of one of the country's most famous literary men, Dr. MANUEL MAYORA CASTILLO, whose death recently occurred in the capital city.



URUGUAY

Carrasco Beach is the name of a NEW SEASIDE RESORT a short distance from Montevideo, which is becoming popular, especially among autoists. The run requires 50 or 60 minutes' time over a fair road. An English company was recently granted a concession for a hotel and the latter is now under construction; nearly a dozen houses have been erected and many tents assist in accommodating the crowds that frequent the resort. By another year it is generally predicted that half a hundred residences will have sprung up, as building lots are now offered for sale and many have been taken by prominent people.—EXCURSION PARTIES from Buenos Aires and other places have invaded Uruguay in large numbers recently; during the month of February 36 different parties arrived in Montevideo and many tourists visited interior towns and cities by train, such as Durazno, Minas, and San Jose. One excursion went to the Brazilian frontier at Rivera, and tourists were permitted to stop off at various towns along the route or to continue the trip into Brazil, the tickets being good for 10 days. The latter part of February a number of excursions were run from interior towns and cities of Uruguay to Montevideo, where the annual carnival celebrations made the capital city very gay.—A statement issued by the Central Uruguay Railway Co. shows the YEARLY DIVIDENDS paid by this company for the past 35 years. The amount oscillated between 3 and 6 per cent for 10 years, and from 1885 to 1889 the dividend reached 7 per cent; in 1889 and 1890 it reached $7\frac{1}{2}$ per cent, which is the highest recorded. For the fiscal year 1912 and 1913 the road paid a dividend of $6\frac{1}{2}$ per cent, and for the whole period of 35 years the average is given at 4.32 per cent. The various extensions of this road also show a very satisfactory profit to the stockholders.—QUICKER MAIL facilities between England and Montevideo are greatly needed, and it is believed that the active steps to this end which are being taken in London by the Chamber of Commerce

will greatly aid the movement.—The Fourth Annual South American ENCAMPMENT OF STUDENTS was recently held at Pirapolis. Students were present from Argentina, Brazil, Chile, and other countries, the total number being 60. The students lived in tents and the commissary was managed by the restaurant department of the Y. M. C. A. of Buenos Aires. Conferences, campfires, and athletic contests were some of the objects of the meeting.—The past year was marked with great success at the MILITARY AND NAVAL ACADEMY, and the recent examinations showed that few students were deficient.—A TUBERCULOSIS CONGRESS, held in Montevideo in January, was attended by many prominent physicians and specialists and the results of the meeting will materially aid in safeguarding the public health.—The AGRICULTURAL SOCIETY of Uruguay met at Montevideo and discussed many problems affecting the progress of the various lines of agricultural development, such as fruit culture, cattle raising, and kindred subjects.—Early in February the Republic issued \$5,000,000 IN BONDS, which was half of the loan authorized by Congress. The loan was negotiated through the Ethelburga Syndicate, of Belgium, and will be used for public improvements.



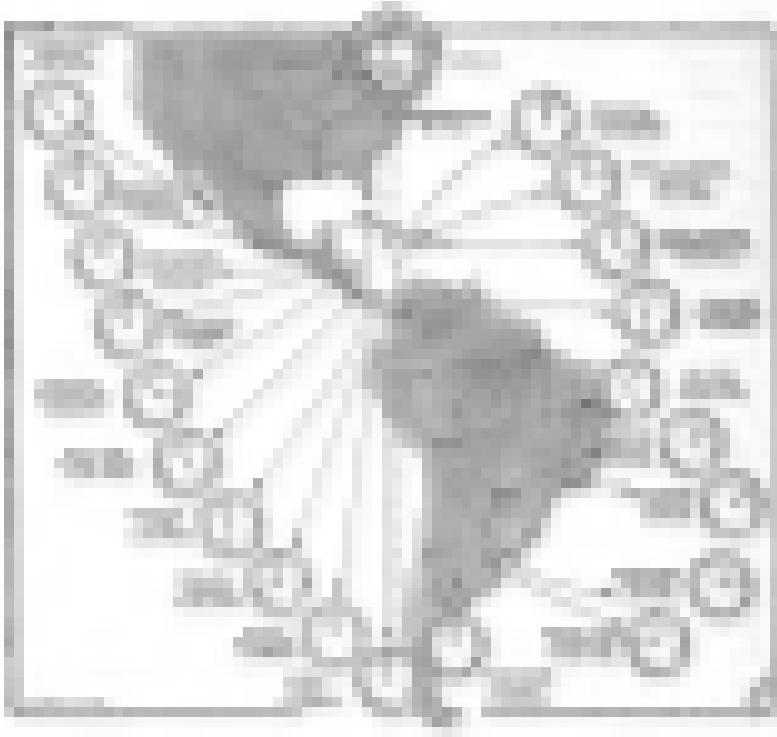
VENEZUELA

The committee appointed by the National Academy of Medicine of Caracas to report upon the adoption of rules and regulations for the practice of MEDICINE, DENTISTRY, AND PHARMACY, has recommended that laws be enacted requiring medical and dental applicants to accompany their applications with a diploma conferred upon them by a Venezuelan university, and specifying that the pharmacist must have a diploma authorizing him to practice pharmacy and in the case of foreign diplomas must take such examinations as are required by law. Doctors, dentists, and midwives graduated abroad must have their diplomas revalidated in accordance with the law.—According to statistics published by the Treasury Department of the Government of Venezuela for the first six months of 1913, Venezuela imported automobiles to the value of 565,329 bolivars (\$113,066); Roman cement, 115,270 bolivars (\$23,054); agricultural machinery and tools, 873,006 bolivars (\$174,601); scientific instruments, etc., 195,667 bolivars (\$39,133); lumber, manufactured and plain, 721,322 bolivars (\$144,264), and machinery, 2,000,000 bolivars (\$400,000). The total exports during the six months of 1913 amounted

to 91,801,854 bolivars (\$18,360,371), or an excess of exports over imports during the period referred to of 40,767,325 bolivars (\$8,153,465).

—The National Equitable LIFE INSURANCE Co. has been reorganized in Caracas with a capital of 6,000,000 bolivars (\$1,200,000). The new company absorbs the Venezuelan Equitable Life Insurance Co. The entire capital of the new organization was subscribed to in Venezuela in less than eight days.—The February, 1914, number of the BULLETIN OF PUBLIC WORKS of the Government of Venezuela contains a number of interesting articles, among which may be mentioned the report on the Llano highway in the State of Tachira, and executive orders disposing of funds for the construction of the Caroa aqueduct and the repair of Santa Rosa castle in Nueva Esparta. The bulletin referred to likewise contains an interesting report of the general manager of the South American Copper Syndicate, Limited, written by Dr. A. Ernst, on the Aroa copper mines, as well as a study by Dr. Rafael Acevedo concerning the betterment of the water supply and forestal conditions in the Federal District.—

A MAP published in Paris under the title of a "New Physical and Objective (Demonstrativo) Map of the United States of Venezuela" has been barred by the Government from being imported into and circulating in the Republic because of boundary and other errors contained in the work.—The commission sent by the Ceiba SUGAR Central of Venezuela to study and investigate the sugar industry in Porto Rico and Cuba, with the object of adopting at La Ceiba methods and machinery in use in the countries mentioned, has returned to Venezuela and recommends that the Ceiba Sugar Central be equipped with modern machinery and operate in accordance with the most approved methods in the manufacture of sugar. The Ceiba Sugar Central is in a prosperous condition and pays large dividends. It is predicted that other sugar centrals in the Republic will follow the example of La Ceiba and adopt up-to-date methods of operation and the most modern machinery known to the sugar industry at the present time.—An executive decree has been promulgated prohibiting negotiations in OFFICIAL DOCUMENTS or historical objects without an official certificate from the chief of the National Archives, the directors of the National Museum, the Academy of Art, or the National Library, stating that said documents or objects do not belong to the nation. The decree forbids the shipment out of the country of national documents or historical objects without a certificate showing that they have first been offered for sale to the Government. Should the Government not desire to purchase objects of this character, they may then be disposed of at private sale.







VOL. XXXVIII

APRIL, 1914.

No. 4

BALBOA AND THE PAN- AMA CELEBRATION : :

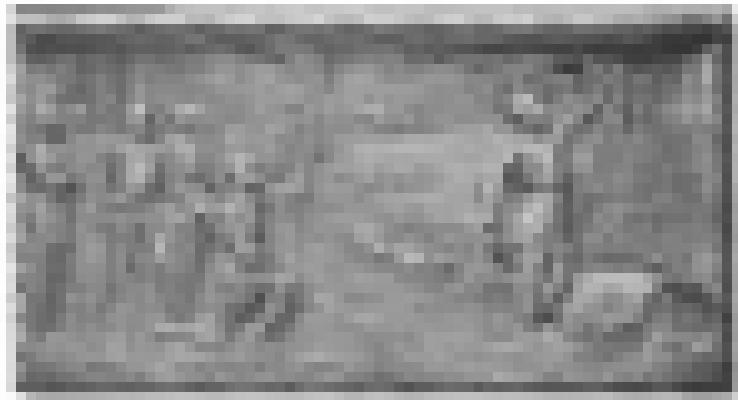
THE Republic of Panama is planning to celebrate two great events of world-wide importance, the one relating to the past—the discovery of the Pacific Ocean by Balboa in 1513; the other to the present—the accessibility of the Pacific through the opening of the Panama Canal.

The details for this celebration are to be found in the publication called *Exposición Nacional de Panamá, conmemorativa del Descubrimiento del Mar del Sur* (National Exposition of Panama, commemorative of the discovery of the Pacific Ocean). The date of the opening of the exposition will be on the 3d of November, 1914, and it is proposed to close it on the 30th of April, 1915. It is quite probable, however, that a longer period will be permitted should seasonable and other conditions be favorable.

Details about the exposition state that it will have as among its principal purposes to do honor to the memory of Vasco Núñez de Balboa, the illustrious discoverer of the Pacific Ocean; to strengthen the ties of friendship already existing between Panama, Spain (as the mother country of Spanish America and the birthplace of Balboa), and the other nations of the western world; and to show to the world the natural resources, the industries, the commerce, and the civilization of the Republic of Panama. The location selected for the buildings is between the present city of Panama and the ancient town of Antigua Panamá, at a place called "El Hatillo," and work has already begun toward preparing the grounds and erecting both permanent and temporary structures.



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There are to be 10 sections of exhibits, arranged as follows: Agriculture; native animals (with fish) and their products; cattle; minerals; liberal arts; fine arts; industries; history; education; public administration. Each of these sections is divided into groups, and these in turn are subdivided into classes, so that every kind of exhibit, whether from domestic or foreign source, will find a suitable place among those of its own kind.

Exhibitors will be particularly from national sources, as the towns and local administrations, corporations, societies, and companies whose work falls into the divisions mentioned; and, in addition, all others, both native and foreign, whether of commercial or industrial character, who may wish to exhibit, and who will therefore send something illustrative of their activities and who conform to the rules established by the Government. It is expressly stated that exhibitors shall have permission to manufacture and to sell their products within the exposition grounds, subject, of course, to the rules governing such cases. Each country accepting representation is to have a proper amount of ground reserved for its buildings and containing exhibits, and freedom from customs dues is allowed under certain conditions.

Prizes are to be given to exhibits worthy of such recognition, and are all to be accompanied by diplomas of merit. There will be a grand prize—a medal of gold, one of silver, and one of bronze, with a diploma of honorable mention, for exhibits in each category. Besides these, there will be special money prizes for the best song poem (by a native of Panama) on the discovery of the Pacific; for the best artistic, literary, or scientific work; for the best exhibit in agriculture, industry, or stock raising; and for the best exhibit of woman's work. Awards will be made by a jury appointed for that purpose.

The outline given above shows the plan and scope of the exposition and should arouse great interest in those who may wish to take advantage of such an opportunity to present their products before the people of the Republic of Panama. They must realize, also, that the visitors to this exposition will not be at all confined to the residents of the city of Panama, the adjacent Canal Zone, or the inhabitants of the Republic. In fact, part of the purpose of the Government itself is to reach by means of this exposition the many travelers and world tourists who will at that time be passing through the canal. These thousands will have their attention called, in a way not otherwise possible, to what is exhibited. The grounds are so close to the city that in most cases the time a steamer consumes between the entrance and exit of the canal can be enjoyably spent in just such an excursion as the exposition will present. While there may be a contrast to the larger expositions at San Francisco and San Diego, it can not be in competition with them, from the very



Photo: AP Wirephoto

Two men stand near the body of a man who was found floating in the water off the coast of San Francisco, Calif., Saturday, June 11, 1988.



Photo: AP Wirephoto

Three men stand near the body of a man who was found floating in the water off the coast of San Francisco, Calif., Saturday, June 11, 1988.

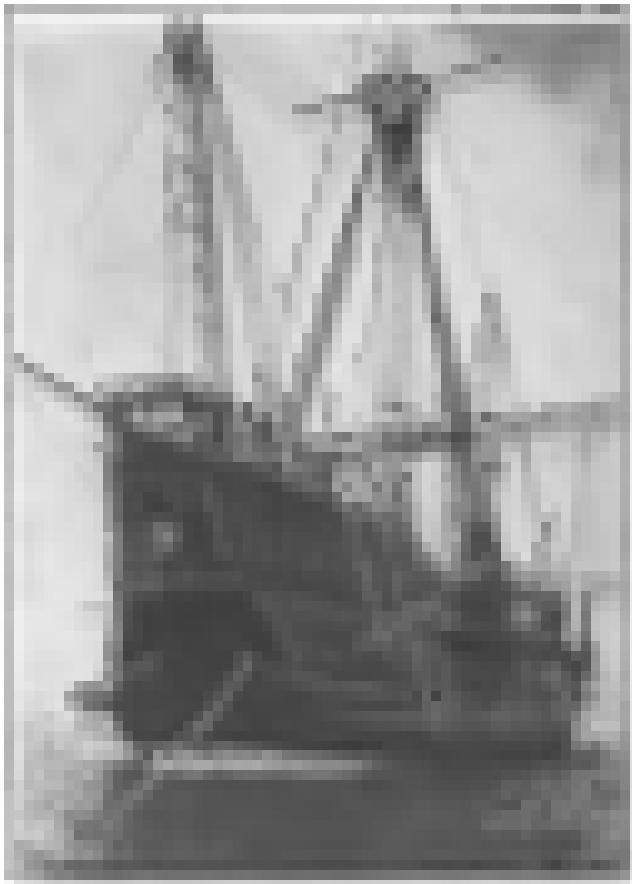
nature of things. And the tropical beauty of the surroundings will add a charm that can find no duplication in any spot on the popular line of travel which the canal is bound to become as soon as it is opened.

The celebration of the opening of the canal, in this manner is, as announced, one of the great purposes of the Government of Panama. To show what a boundless new world, in the sense of accessibility and service, will be opened by this entrance to the Pacific, to attract attention to the future of all the area washed by this ocean, is the commendable ambition of the Government. But looking backward to the beginnings of the knowledge of the Pacific, given to Europeans by Balboa, the Government of Panama wants to do homage to that intrepid explorer and discoverer, and in its historical significance, therefore, this exposition will be part of the celebration of that event which took place not far from the very spot on which the ground is to-day laid out and the buildings will be erected, four centuries (September 25, 1513) ago.

The story of Vasco Núñez de Balboa is one that can never be too often told. How he gave up a life to which he was little fitted; how he reversed the policy of his predecessor, who had offended and even maltreated the natives on the Isthmus, so that the confidence and assistance of these very natives were turned to Balboa's advantage and of the Crown of Spain; how he discovered the south sea—the Pacific Ocean—and was rewarded by his sovereign; and how he met his death when greater victory was almost within his grasp—all these events of his too short life should be repeated to young and old, as a happy contrast to the sometimes gloomy and uninspiring tales which have come down to us of the early days of the discovery of America.

Balboa, as he is best known in history, Vasco Núñez de Balboa as was his fuller name, was born in the Province of Estremadura, Spain, about the year 1475. He came of a good family, and seems to have been better educated than most men of his time. In early life he migrated to America, and, after the usual adventures of a young man in that New World, he tried to settle down to the routine of a practical farmer. That he was not designed for it subsequent developments rapidly proved, for he fell into debt and was considered rather an improvident fellow in the town.

Perhaps it was this hopeless debt that meant Balboa's fortune. At any rate, to escape and to try a new life was his reason for having himself concealed in some way so that he could be smuggled on shipboard and carried away from his failures to begin this new life elsewhere. He escaped in Enciso's ship from Santo Domingo and discovered himself only when well on the voyage to the coast of Darien. This Enciso was one of the best geographers of the day. He knew about all there was worth knowing, especially of the New



A wooden structure of some sort.



A wall made of small stones.

World; he was a close observer and probably a good judge of men, for instead of punishing his foundling Núñez, the commander, Enciso, landed him among the desperate colonists at a fort in the Gulf of Darien, there to work out his salvation and perhaps that of his countrymen about him.

It was in 1510 that Balboa's life story began. He found the people of the settlement discouraged, divided into factions, miserably unhappy, and without a leader. But Balboa had the spirit of leadership, and at once he took upon himself the labor of restoring confidence and of wresting success out of failure. His influence was magnetic, and the people trusted him. Even Francisco Pizarro, who later was to follow the path that Balboa had marked out but was never permitted to enter, older, too, than Balboa, at once yielded to him and at the time seconded his every effort. His first care was to gather together the scattered remnants of the former expeditions (Sir Clements Markham, *The Geographical Journal*, June, 1913), some at Uraba fort, others living among the Indians along the coast. This was a most difficult task, but thanks to the energy of one man it was done. He fed the hungry, nursed the sick, helped build huts for the able-bodied, and thus persistently brought about improvement for all.

But the supply of food was the great difficulty, due largely to the cruel treatment and robbery of the natives which had marked the misconduct of his predecessors. Vasco Núñez de Balboa had to gain the confidence of these natives, to overcome their suspicions, and to make friends of them. He succeeded with them as he had with his own countrymen. He won over warlike tribes that had hitherto suffered from injustice and injury; but to get food he had to penetrate the jungle, often through swamps, always in the burning sun, before he could reach the centers of their cultivation, whence these natives could be induced to bring food to the market of the Spaniards. In time, however, his wise policy, his energy, and his patience won, and this leader established in all the feeling that integrity and confidence would prevail. Such admirable conduct brought reward in the recognition of his accomplishment. The admiral, the son of Columbus, sent provisions for Balboa's colony, and from the audiencia of San Domingo was given the appointment of alcalde mayor of the colony he had created.

Vasco Núñez de Balboa, when this preliminary work was well in hand, began the exploration of the isthmian region around him, with especial regard to information on the resources of the country and the probable supply of gold. He became acquainted with the native rulers of Coiba, of Comogre, and of Pocorosa—it is said that he actually married the daughter of one of the chiefs—and was admitted to their friendship. He wrote to the Emperor Charles V about his



investigations, and held out hopes of acquiring substantial gains for the Spanish Crown. It was indeed on one of his expeditions into the interior in search of gold that he met the son of the cacique of Comogre, who told Balboa, somewhat in jest at the Spanish desire for gold, that the country beyond was far richer in the metal they deemed so precious; that, in fact, if they wanted to go only a slight distance across the mountains they could view a mighty ocean, larger perhaps but calmer more pacific than the one lying to the north.

If the information were true, so thought Balboa to himself, he would try to be the first to set eyes upon it. This chance remark had been in 1513, and on the 1st of September of that year he set out from the Caribbean coast, with a few Spaniards and an escort of friendly natives, to cross the Isthmus. They plodded through the jungle; they scaled the little intervening hills; they pushed their way across the streams till, on the 25th of September, 1513, Balboa, who had been warned by his guides that the water of the southern sea was not far off, climbed a tree and for the first time caught sight of what we now call the Pacific Ocean.

On the 29th of September, 1513, Balboa actually entered the water, waving the flag of his country over his head, and claiming it in the name of his sovereign. The all too few years remaining to him he devoted to further explorations on the coast, and gave all his energies to planning an expedition along it, and even to a discovery of what might lay to the south, of what he heard rumors, in the great kingdom of the Incas. Certain it is that he visited the Pearl Islands, but only after he had, with almost overwhelming hardships, collected at Acla material for small vessels that were ultimately built on the shores of the Gulf of San Miguel, and launched them there.

His triumph was, alas, but short lived. Jealousy of his deeds and incompetency of his associates led to accusations against him. He was called across the Isthmus to meet these charges, but his enemies could not be content with the slow and perhaps justice-seeking processes of the courts. He was arrested and sarcastically tried and condemned for anything that seemed an easy test of guilt. He was executed by his accusers at Acla, the town he had helped to found—that is, murdered—in his forty-second year.

What results to the world might have come by discoveries in Peru and elsewhere in South America if Vasco Núñez de Balboa had lived to continue his enlightened, just, and gentle policy is a matter of mere speculation. The fact that he discovered the Pacific Ocean, surmounting material obstacles and winning over instead of killing the natives, shows the character of the man. He was a leader, an explorer, and a builder. In doing honor to the man Balboa, and to the event that crowns his life, the Republic of Panama sets an example that must bring praise and support from all the world.

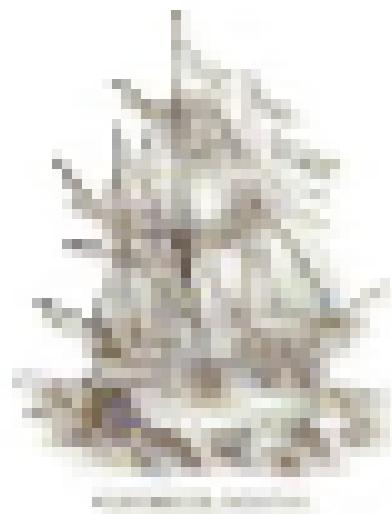
Thus Panama unites in one celebration the two great epochs of the Pacific, the one being in essence but the fulfillment of the other. Where the first glimpse was caught by the European is a splendid place from which to lead his imagination on to what lies beyond. And, although some of the buildings themselves are to remain as permanent memento of the year and of the opening of the canal, another substantial monument to Balboa and his achievement is to be erected on the shores of the Pacific.

Spain, the mother country, is represented through King Alfonso, who has devoted from his private purse the sum of 50,000 pesetas (\$10,000) toward the construction of the statue to Vasco Núñez de Balboa to be erected in Panama, and from Spain will come the bronze for its construction. The President of Panama, Dr. Porras, has contributed a like amount. Cuba has added \$5,000, Guatemala \$2,000, Costa Rica, Salvador, Nicaragua, and Honduras their proportions, and others signify their intention to contribute to the statue, which will thus become a special monument from the Spanish-speaking peoples. Various municipalities in Spain* and similar organizations in Panama and elsewhere are sending money. The ambition of the Republic of Panama, therefore, to erect a statue to cost at least \$50,000 (gold) will surely be realized. In the text of a letter to King Alfonso President Porras said: "The statue will be placed at the side of the canal, where it may be saluted by the flags of all nations and by the peoples of all races as they pass from one ocean to the other." A distinguished Spanish sculptor has been practically selected as the artist. Señor Benlliure has done some splendid work in his native country and in Argentina, and has been appointed senator of the Kingdom on that account.

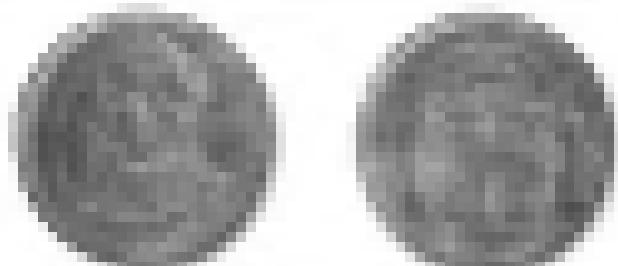
Panama, moreover, has perpetuated the discoverer's memory by naming its national coin the balboa, by placing his portrait upon one of its national stamps, and by setting aside as a national holiday the 25th of September. The United States will issue its 1-cent Panama-Pacific Exposition stamp as a Balboa souvenir.

While these preparations are so earnestly going forward in Panama itself, abundant honor has, on the date of the discovery, been given Balboa by many learned societies in other parts of the world. The Royal Geographic Society of Spain held in Madrid a ceremony commemorative of the discovery, in which homage was paid to his memory. The Royal Geographical Society of England held services of respect to Balboa, in which the scholarly Sir Clements R. Markham gave a noteworthy review of the discoverer's life, with laudatory recognition of his great accomplishment. The Mexican Geographical and Statistical Society held a special meeting in honor of the event,

* Popular subscriptions in Spain amount to more than 200,000 pesetas. Argentina, Uruguay, and Chile contribute with 25,000 pesetas each.



and the question you raised has a valid application. But I would say that there are other considerations that influence the outcome of the debate. There is a general hope that more and more people will be willing to accept the new technologies and the changes in the way we live our lives. This is a very important factor in the development of the industry. It's also true that there are many different types of companies involved in the industry, and some of them are more successful than others.

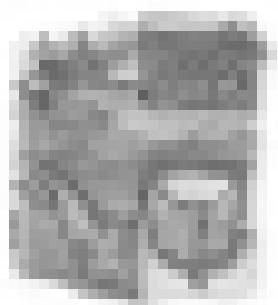


Photographs 1 and 2: Interior of a tunnel.

The second argument for acceptance is that the new technologies are better for the environment. They are more efficient and produce less waste. This is another factor that influences the acceptance of new technologies.

Well, I think the evidence is clear that the new technologies are better for the environment. They are more efficient and produce less waste. This is another factor that influences the acceptance of new technologies.

The third argument for acceptance is that the new technologies are better for the environment. They are more efficient and produce less waste. This is another factor that influences the acceptance of new technologies.

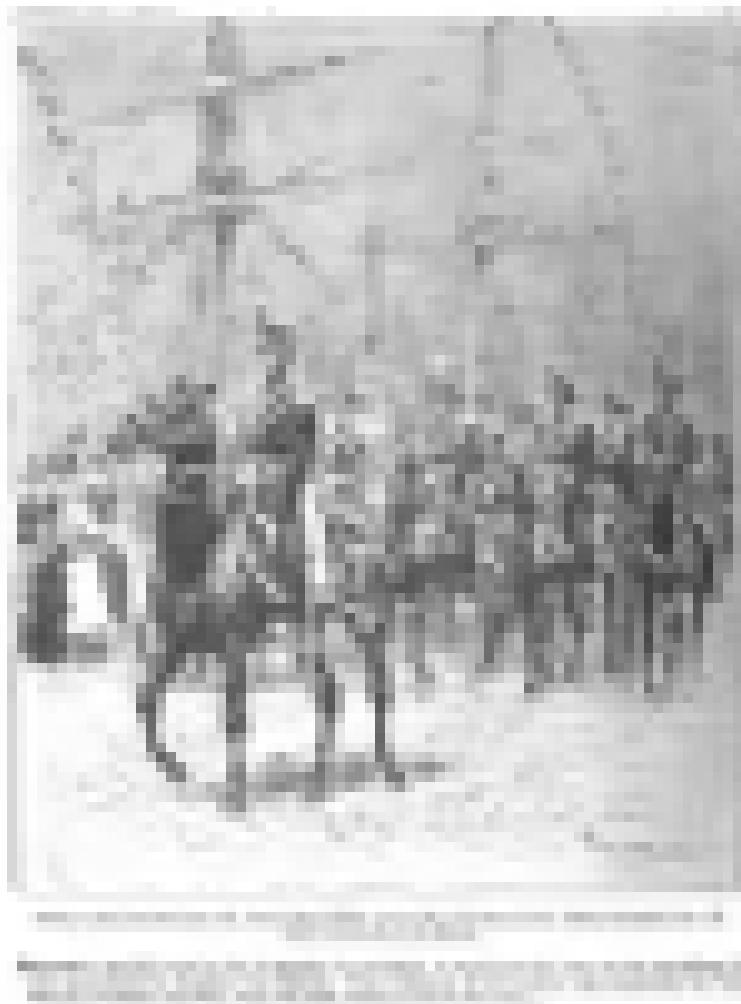


THE ARGENTINE SOUTH-WARD MOVEMENT¹

THE expansion of Argentina during the past 40 years into the temperate quarters of the South American Continent is fully as interesting a field for study as a southward movement, so to speak, as are the similar westward movements in the United States and Canada, the eastward one in Russia, or the northward one of South Africa. The same pioneer conditions change into rapidly growing settlements as the aborigines retreat; the same scientific methods reduce supposedly useless areas to sources of present economic wealth and prospective gain for the future.

No South American country has developed and settled so much contiguously unsettled territory in so short a time as has Argentina; none have had so much temperate land lying at their gates that cried aloud for the white man's coming. The Spaniard's settlement at Nootka Sound, in 1790, was far higher in the northern latitudes than any of their South American towns were in the southern. Only in southern Chile did the Spanish colonists find a climate anything approaching the average climate of Spain. If we draw a line directly across Argentina from a point 50 miles south of Buenos Aires to the Chilean frontier, we shall find scarcely a permanent settlement south thereof in 1816, when Argentina obtained her independence. Even Quilmes was not founded until 1677; Samborombon Bay was the southernmost settlement in 1744. In 1740 the Tehuelches had attacked Buenos Aires itself, then a poor town of 10,000 people; in 1780 they were burning houses within 10 miles of it, and another near-by Indian invasion took place in 1789. The lonely outpost of Bahia Blanca remained from 1828 to 1878 the furthermost contiguous southern Argentine community. In October, 1875, Argentine control extended only to the Rio Cuarto and to a line drawn northwest thereto from Bahia Blanca. The whole Rio Cuarto region had been raided by Indians in 1872. There had been Patagonian explorations enough in both the Spanish and colonial times. Shakespeare mentions Setebos, a Patagonian devil, in *The Tempest*. This was a reminiscence of Francis Drake's touching at Port St. Julian. Father Falkner's journey, in 1746—as was Father Lozano's from December, 1745, to April 6, 1746, reaching Puerto Deseado January 6, 1746—revealed much of the northern part of the coast and a little of the interior.

¹ By Charles Lyon Chandler.



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To Francisco de Biedma belongs the credit of being the first to exhibit in detail and urge with persistency the advantages of developing the Patagonian coast and hinterland. His detailed report to the viceroy of Buenos Aires, the Marquis of Loreto, made in March, 1774, showing the strategic importance of the Rio Negro as a line of defense would have been as pertinent a hundred years later. It was the chief cause of the royal order of King Charles III of June 8, 1778, which ordered forts and towns to be established on the east coast of South America to the Strait of Magellan. It is interesting to note that Spain had just declared war on England to aid the United States of America in establishing their independence, and several whalers manned by citizens of Massachusetts were then cruising off Patagonia. On April 23, 1779, Biedma started to found a town on the site of the present Biedma, but a flood in the Rio Negro, which Biedma had already explored, caused him to abandon this plan, and the present town of Carmen de Patagonia was founded in June, 1779. His brother Antonio de Biedma explored the Patagonian coast from 1780 to 1783 and spent almost the whole of the year 1782 in ascending the Santa Cruz River, discovering Lake Biedma, and exploring much of the surrounding country. The pilot, Basilio Villarino, acting under orders from Francisco de Biedma, explored the Rio Negro, the Limay, and Neuquen Rivers from September 25, 1782, to May 25, 1783.

Our readers will remember that it was in 1783 that the Spaniards had possession of what is now the city of Chicago in the United States for a little while; it is interesting to speculate as to what would have occurred if the expedition from St. Louis had succeeded in remaining on the borders of Lake Michigan. Lake Nahuel Huapi had been discovered by the Jesuit, Nicolas Mascardi, in 1690, proceeding from Chile.

The importance of the Rio Negro as a line of defense was also urged by Sebastian Undiano y Gastelu, and Felix de Azara, whose scientifically trained mind foresaw so much, did likewise in 1796 as the only sure means of effectively controlling and developing the pampas. This maintaining a river as the furthestmost limit of expansion in a temperate country of settlement we also find in other parts of the world, the Orange River in South Africa and some of the Siberian rivers having served at different times as temporary barriers to the onward progress of civilization. The journey of Luis de la Cruz, alcalde of Concepcion, in Chile, across the continent by a zigzag route from Ballenar to Buenos Aires, from April 7 to August 16, 1806, is noteworthy as occurring at almost the same time as that of Lewis and Clark in North America. Cruz estimated 46,051 Spanish dollars would be needed to improve the road between Chile and Buenos Aires by the way of Neuquen. One hundred years later a



Posterior-lateral view.

The heart is small and weighs 250 g. The left ventricle is markedly hypertrophied and the right ventricle is normal. The myocardium is thin and pale. The epicardial fat is thickened and yellowish. The coronary arteries are patent. The heart is surrounded by a large amount of pale, watery fluid.



明人畫《武松打虎》。武松是《水滸傳》中的一位重要人物，這幅畫作展示了他與老虎搏鬥的場景。

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member of the staff of the Pan American Union made this journey by the railway automobile, and across the Andes from capital to capital in seven days; and Col. Roosevelt's comments on this same journey, which he has just made, will make interesting reading beside those of de la Cruz.

But no real action came until 1878, though President Bartolomé Mitre's administration had passed the law of August 23, 1867, ordering the establishment of the frontier lines on the left bank of the Rivers Negro and Neuquen, and Francisco P. Moreno had raised the Argentine flag on the banks of Nahuel Huapi on January 20, 1876. The law of October 4, 1878, put this 1867 law into practical effect by appropriating \$1,600,000 to fulfill it, and operations were begun at once against an estimated force of 20,000 Indians, 1,800 to 2,000 of whom were armed with lances.

The military frontier then extended northeast from Bahia Blanca to Necochea, Gainza, and Rio Cuarto, thence almost due westward to the Chilean frontier. The whole of what are now the Territories of Rio Negro, Neuquen, Santa Cruz, and Chubut were the roaming grounds of the Tehuelches. From the founding of Bahia Blanca, in 1828, to Gen. Roca's expedition, 50 years later, practically no change had taken place in the extension of the settled area under the control of the Argentine Government, the Welsh settlements of Rawson and Madryn in the Chubut, founded in 1865, and a few isolated posts along the coast being the sole indications of Argentine sovereignty over more than half the area of the Republic. The Tehuelches roamed unchecked over the same prairies in 1878 where they were hunting guanacos when Magellan skirted the coast 300 years before.

Bahia Blanca had been severely attacked by them in 1872; in that same year they raided the Rio Cuarto region; Musters had met large numbers of them in 1869 and 1870, when he explored almost all the way across the continent from the mouth of the Rio Negro to Lake Nahuel Huapi, and had skirted the Andes even farther south, showing a part of what remained for the Argentinians to develop and to explore.

Roca's expedition of 1879 is unquestionably the most important and far-reaching event in Argentine history since the present constitution was adopted in 1860. In a broader sense, it may be said to be one of the most far-reaching occurrences in the history of the development of the South American Continent, as well as in the world at large, for it marked the beginning of the settlement and cultivation of the largest undeveloped temperate area in the Americas. It was a purely Argentine, a nobly national initiative; it marks the beginning of Argentina's finding herself a nation, of her bursting forth from petty localization.



Fig. 1. A view of the scrubland area.

The scrubland area is situated on a coastal plain, which is bounded by a steep escarpment to the east and a coastal lagoon to the west. The area is characterized by a dense growth of low-lying, woody plants, primarily *Zizaniopsis miliacea* (purple grama grass), *Acacia cyclops* (black wattle), and *Acacia farnesiana* (sweet acacia). The scrubland extends from the base of the escarpment to the edge of the lagoon, where it meets a sandy beach.



Fig. 2. A view of the escarpment area.

The escarpment area is located on the eastern side of the coastal plain, where the land rises sharply from the flat scrubland area. The base of the escarpment is covered in dense scrubland, while the upper slopes are composed of rocky soil and sparse vegetation. The escarpment itself is a prominent feature, with a steep drop-off to the coastal lagoon below.



Wetlands are among the most important ecosystems in the world, supporting biodiversity and providing many environmental services.



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Roca's constructive mind had long been intent on the Patagonian question. In his prophetic letter of April 24, 1876, to the editor of *La Republica* of Buenos Aires he alludes to Albert Sidney Johnston's Utah expedition of 1857, and there is reason to believe that the westward movement of the United States influenced him in his strenuous endeavors to promote the similar Argentine southward movement. Argentina's President was then Nicolas Avellaneda, whose quiet activities have resulted in much to his country's welfare. Adolfo Alsina, one of his oldest cabinet ministers, also seconded the movement.

Roca himself became minister of war in 1878 and left Buenos Aires on April 16, 1879, with 6,000 men and 20,000 horses, a well-equipped scientific staff, and an excellent corps of photographers. This was the largest Argentine force that had ever proceeded against the Indians. On May 25, the Argentine national holiday, the expedition was at Choele Choel, and by the end of June the desired results had been obtained. Dr. Estanislao S. Zeballo's graphic narrative vividly portrays this expedition.

In 1879, under Roca's orders, Maj. Jordan Wysoski went as far as Port San Antonio on a minute reconnaissance along the Patagonian coast. The revolution of 1880 checked matters only temporarily, as it brought Roca himself into the Presidency. The southernmost limit of Argentine railways was at Azul and Ayacucho in the Province of Buenos Aires in that year, while the Chilean railways extended as far south as Talcuahuano and Angol. Throughout both his presidential terms he bestowed particular attention to newest Argentina. In 1881 Gen. Conrado Villegas's expedition to Lake Nahuel Huapi occurred from March to June, and on July 29 the important boundary treaty with Chile was signed, which was to delimit the frontier for 22 years and secure the Patagonian Territories from any fear of foreign intervention. In 1884 the first law of territories provided a political organization for southern Argentina; for, and from now on, "Patagonia," save as a geographical expression, ceases to represent any political division.

Seldom in the history of the world has so large a tract of country been conquered, explored, and politically divided within five years after the April morning when Roca had left Buenos Aires on his memorable expedition. Patagonia had ceased to exist, the Territories of Rio Negro, Neuquen, Chubut, and Santa Cruz springing into being; Bahia Blanca and Buenos Aires were connected by rail, and the hardy scientific explorer, Francisco P. Moreno, had revealed the beauties of the lake, river, and mountain scenery of the southern cordillera.



THE CITY OF MATANZAS.

ABOUT 60 miles east of Habana, on a landlocked bay of the north coast of Cuba, lies Matanzas, one of nature's favored spots—by its climate, its scenery, and the amiability of its inhabitants.

Although no longer what it once was, for its palmy days have long since passed, there seems to be an industrial awakening that promises better things for the future, and, possibly, the city once known as the Athens of Cuba, the home of Heredia, of Milanes, of Placido, may again merit its title. At all events, even the Matanzas of to-day deserves to be better known, and it would be better known if some enterprising individual or company would establish a first-class hotel on the heights above the town. The average tourist takes an early train from Habana, reaches Matanzas in about two hours and a half, takes a carriage or automobile and rushes off to the caves, the great attraction of the place. He may spend there an hour or two, then if he is not too tired and if he has time he goes up to Monserrat to look down into the Yumuri Valley, and returns to Habana full of admiration for what he has seen.

Let us take more time and leisurely wander around while we inspect the details. Matanzas is known in Cuba as the ciudad de los dos rios, the city of the two rivers. These rivers that divide the town into three parts are the San Juan and the Yumuri. The entire city descends from the slopes down to the Bay of Matanzas that, like a beautiful crescent, sends its waves, set in motion by the great ocean on the north, to wash the shores of Matanzas, Pueblo Nuevo, and Versalles. Matanzas proper occupies the center. Beginning on the hills back of the town, it gradually narrows between the rivers until it reaches the shore. As you face the bay the Rio San Juan on your right separates Matanzas from Pueblo Nuevo. This river is crossed by several bridges, the one nearest the bay being revolving to admit the passage of vessels from the sea. On your left, along the shore, lies the suburb of Versalles, most beautiful, but lacking the wealth of former times. The population of Matanzas may be estimated at 20,000, that of Pueblo Nuevo at 15,000, and of Versalles at 8,000.

Matanzas and its suburbs are laid out in squares with streets crossing at rectangles, Versalles being the least regular. Versalles and Matanzas are divided by the River Yumuri, that is crossed by a fine bridge not far from the mouth. The city proper is fronted by a dock of sufficient capacity for small craft situated near the mouth of the San Juan. Large vessels must anchor out in the bay, though comparatively near the shore. There are always during the grinding

¹ By Rt. Rev. Charles Warren Currier, bishop of Matanzas.



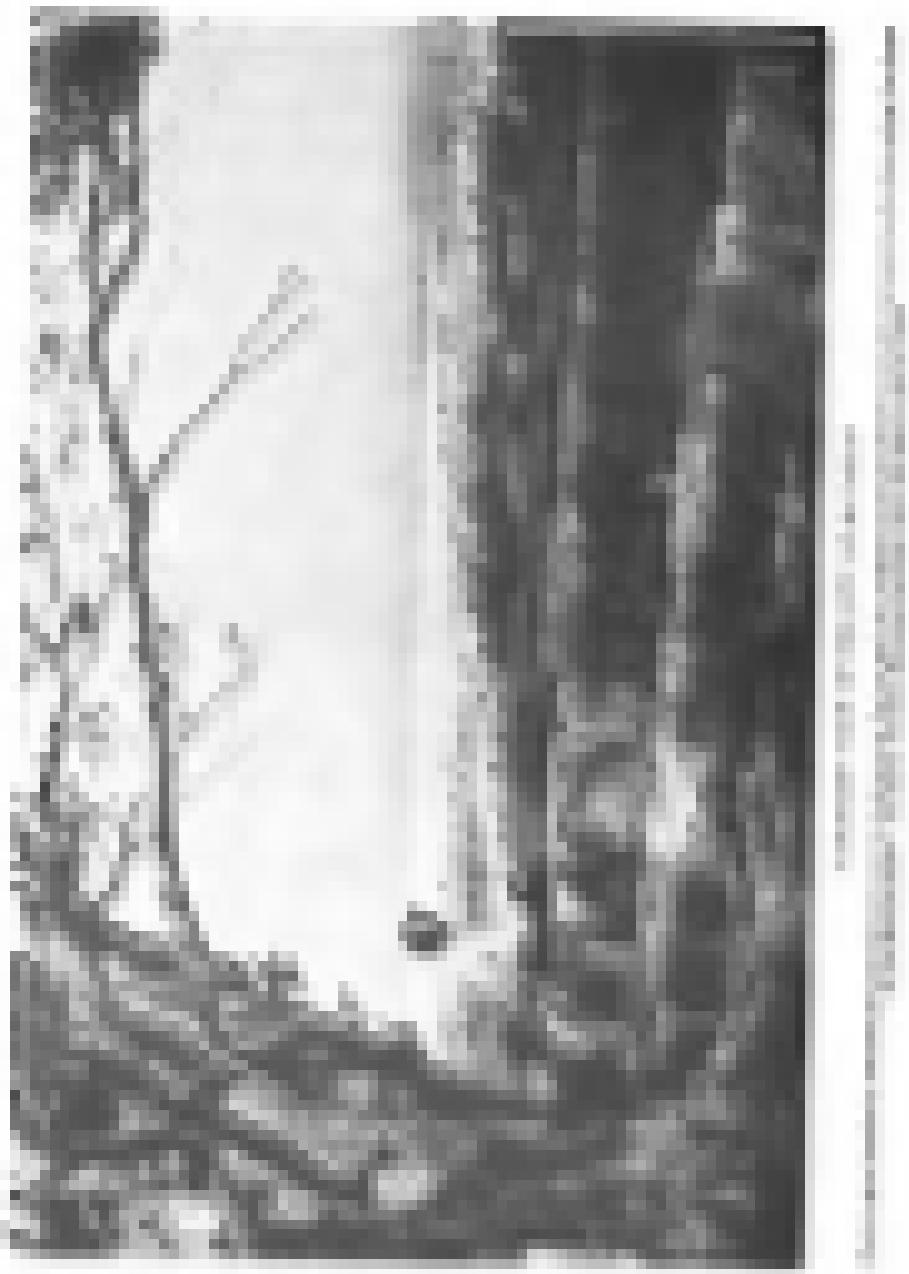
season some steamers, square-rigged vessels, and schooners lying at anchor. Their object in coming to Matanzas is generally to ship sugar, that article being the principal product of the Province of Matanzas, of which this city is the capital. The Munson Line sends its ships regularly to this port.

The main commercial artery of the city of Matanzas is the San Juan River. Long lines of immense sugar warehouses stretch along this river on the Pueblo Nuevo side, and all day long during the season tugboats, like the *Yucayo*, the *Yumuri*, and others are towing huge lighters laden with bags of sugar down the river to the vessels in the harbor. This sugar is the product of at least 40 sugar mills scattered throughout the Province, the cane being grown everywhere in plantations, large and small. The larger plantations, where grinding is done, are known as ingenios. The material is conveyed to these centers by broad or narrow gauge railroads, or by oxcarts. The ingenios are generally connected by private railroads with the main line that carries the sugar to Matanzas or to Cardenas, the principal ports of the Province. The depots or warehouses are owned by the commission merchants.

Another important industry of Pueblo Nuevo is the cultivation of henequen (called here hemp), a species of maguey, and its conversion into cordage. Immense tracts south of the city are covered with the plant, the form of which is much like the aloes. The factory, situated among the henequen fields, is operated by a German company, giving employment to hundreds of men and women. The product of this industry is used mainly for home consumption. Among other industries must also be mentioned El Cayo, west of the San Juan, on the Matanzas side, engaged in the fabrication of meat products and the preparation of skins and leather from which a shoe is made that is extensively used by the country people. The petroleum industry of the city of Matanzas should also be mentioned. The petroleum refinery in Matanzas supplies the whole island.

The environs of Matanzas are noted for the beauty of their scenery and for the remarkable caves about 3 miles southeast of the city. The latter are at present the principal attraction for tourists, who during the season come in considerable numbers. The best view is obtained from the Hill of Monserrat that rises above Matanzas and from the Cumbre, the highest hill towering over Versalles. The Yumuri River, flowing through the valley of its name, forms the narrow gorge between Monserrat and the Cumbre that gives it an outlet to Versalles and to the bay.

Monserrat is reached on the north by a road, the Carretera de Monserrat, that passes the beautiful villa or quinta once occupied by Gen. Wilson when governor of Matanzas during the first American intervention. It is still known as the Villa Wilson. Unfortunately the fine grounds, with their statuary, have been permitted to fall into a condition of deplorable decay.



The scenery from the heights of Monserrat is unsurpassed. On the south Matanzas and Pueblo Nuevo lie at your feet; on the east your eye wanders over the bay, while on the north you look down upon the incomparable beauty of the Yumuri Valley—according to the opinion of the great Alexander von Humboldt, the most beautiful in the world. Humboldt had seen many a valley—and his judgment carries weight—so that we may at least conclude that the Yumuri Valley, even to-day, is one of the most beautiful in existence. The best view is obtained from the roof, or azotea, of the chapel.

This chapel was erected in 1875 by a Catalan society in memory of the world-famous shrine on the wonderful mountain in Catalonia. The retablo of the altar, intended to imitate that mountain, is an ingenious piece of work, made entirely of cork. A St. Felix of Cantalicio in the chapel is supposed to be an original of Murillo. Four life-size statues in front of the chapel typify the four Provinces of Catalonia—Gerona, Tarragona, Lerida, and Barcelona.

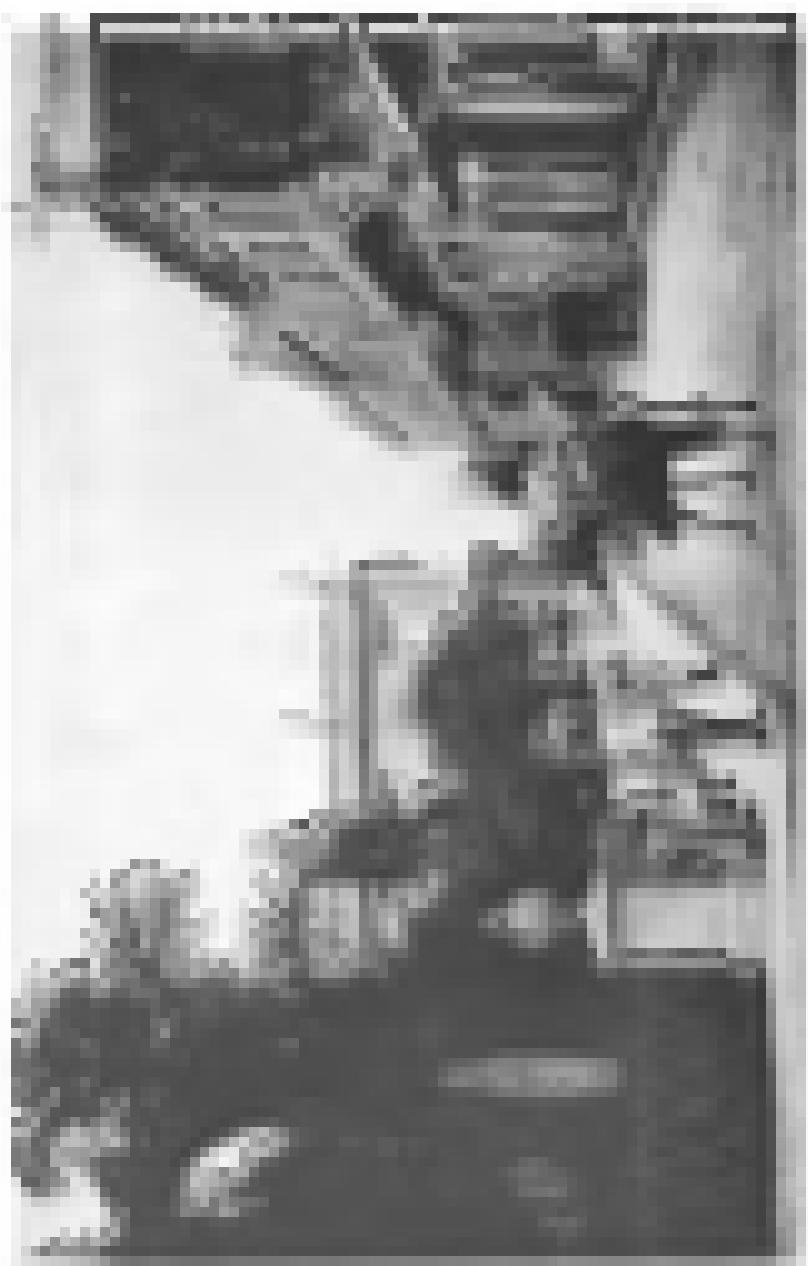
At the present time the building and its adjacent grounds belong to the Spanish colony of Matanzas, that is putting up a large and sumptuous club building not far from the chapel. Should they decide to use this building as a hotel in winter it can not fail to be a decided attraction to the tourist.

On the feast of Monserrat, in December, immense crowds resort to this mountain.

Crossing the Yumuri, we ascend the slopes of the Cumbre, once dotted with beautiful villas, the blackened ruins of some bearing fearful witness to the devastation that war has brought, while others in a state of decay are tenanted by everybody except the original masters. The Cumbre, like Monserrat, looks down upon the beautiful Yumuri Valley and over the city and bay.

Somewhere about 1861 the caves on the other side of Matanzas were discovered by a Chinese who is still to be seen at the little house, built over the entrance. He was engaged in digging with a crowbar, when the tool slipping from his hand, disappeared in the earth. The place now belongs to the owners of the henequen plantations. It is well kept, and the caverns are for a considerable distance lighted by electricity. These subterranean passages, rooms, and large halls, glittering in the light with immense stalactites and stalagmites, are wondrous excavations made in some remote period by the hand of nature. It is said that they have never been completely explored. One branch runs west to the bed of the ocean, while the other, at a great depth below the surface, proceeds no one knows how far in the direction of Santiago de Cuba. Subterranean rivers and lakes seem here and there to alternate with the rock-girt grottoes. The caves are visited in the winter season by a large number of tourists.

We may now return to the city of the two rivers, and before examining further its details cast a glance at its history. The origin of the





THE HISTORIC TEMPLE OF THE WOODEN BELL

The temple of the Wooden Bell is one of the most famous landmarks in the city of Hanoi.

PHOTOGRAPH BY JAMES M. COOPER

name of Matanzas is more or less obscure. "Matanzas," from "matar," to kill, means a slaughtering. Some say it was thus called because the whites slaughtered the Indians; others, on account of a massacre of the former by the latter; while a third opinion derives the name from the fact that slaughterhouses existed here at an early period to supply the surrounding country with meat.

Before the advent of Europeans the island was divided into several districts governed by caciques or chiefs. That of Habana extended over the region now occupied by the Province of Matanzas. The last of the Indians of this region disappeared between 1539 and 1564, those that had escaped the Spaniards taking refuge in Florida.

We can trace a white population on the site of Matanzas back to 1607. The city, however, was not founded until toward the end of the century, or in 1693, when on Saturday, October 10, its lines were traced by the governor of the island, Don Severino de Manzaneda.

The object of greatest interest in Matanzas is the cathedral, an edifice in classic style. The first stone of the original parish church of San Carlos, now completely disappeared, was laid October 12, 1693, by the bishop of Cuba, the only one then in the island, Diego Evelino de Compostela. In the old worm-eaten baptismal record the first two entries are in the bishop's own hand, recording the baptism of two negroes, both slaves, one of whom was a native of Congo.

The coasts of Cuba were in those days greatly exposed to the incursions of the buccaneers, and churches and houses were built like fortresses to withstand their incursions.

The present church of San Carlos, raised to the dignity of a cathedral by Pope Pius X in 1913, dates from the early part of the nineteenth century.

It is a fine edifice in chaste classic style. The artistic decorations now in progress promise to render it one of the finest churches in Cuba.

Other public buildings in the city are the town hall, the court of justice, the customhouse, the Spanish Club, several theaters, banks, etc.

The town hall, casa ciudad, contains the offices of the civil government, of the provincial council, and of the ayuntamiento or municipal administracion. The governor of the province has also his office in this building. The governor of Matanzas, Sr. Rafael Iturralde, is a young man of marked ability who has raised himself to his position by dint of personal energy.

The building is located on the great square, or Plaza de la Libertad, a fine promenade resorted to by great numbers of Matanceros, who, as in some other countries of Latin America, find their amusement in walking round and round. In the center stands a statue of Jose Marti, the patriot.

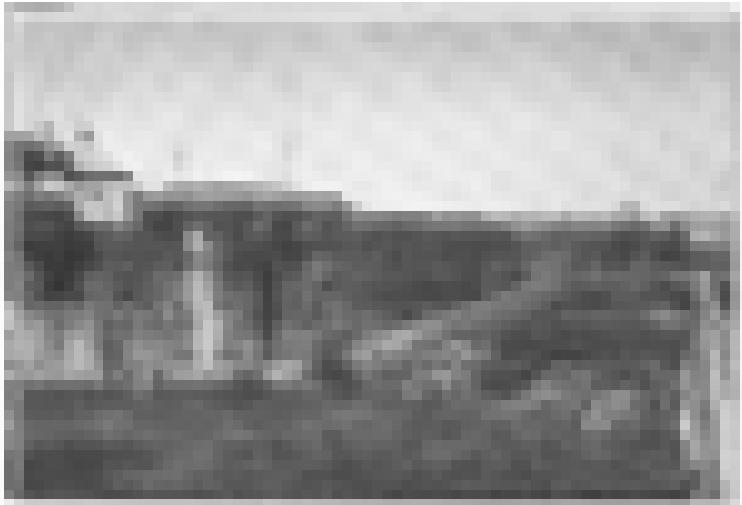
The court of justice, or audiencia, is, as its name devotes, devoted to the administration of justice. The lower story of the building, with a fine patio, was erected in 1826. The second story, which now



Frontal view of the mound



View of the causeway leading to the mound



View of the causeway leading to the mound





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ISBN 0-520-06620-2
\$19.95 cloth
ISBN 0-520-06621-0
\$12.95 paper

really serves as the courthouse, was added in recent years under Cuban administration. Noteworthy are the old archives of the Province of Matanzas and the civil registers.

Matanzas was long known as the Athens of Cuba. Here flourished the poets Heredia, the author of "Niagara;" Milanes, the most popular of Cuban poets; Placido, the mulatto patriot; Tolon, Delmonte, and others. Although there has been a marked literary decadence, Matanzas still possesses poets of no mean ability, like Bonifacio Byrne, a gentleman of Irish descent whose name is pronounced "Beerne" by the Cubans. The houses where lived Milanes and Placido are marked by tablets that the people of Matanzas have placed to their memory. One of the great bibliographers of America resides in Matanzas. The *Bibliografia Cubana del Siglo XIX*, of Señor Carlos Trelles, is a monumental work.

The Liceo is an old literary and social organization that is now awakening to a new life. Its building is situated on the Plaza de la Libertad. Completely restored, it is practically new, presenting the qualities of an edifice that would be a credit to any city. The Liceo is the successor of the old Club de Matanzas, that had been founded in 1877, the change taking place in 1882 with subordinate sections of literature, lyric poetry, elocution, and science. Brilliant literary memories hover around the old Liceo. In fact its name was adopted in honor of the old "Artistic Lyceum of Matanzas" that flourished between 1860 and 1868; perhaps the most brilliant celebration of the old Lyceum was that witnessed when Gertrudis Gomez de Avellaneda visited Matanzas in 1861. The poetess was solemnly crowned with a wreath of laurel and gold, and a discourse was delivered by the celebrated Domingo Delmonte, himself one of the noted Cuban poets, and the Mæcenas of Matanzas.

Versalles is a fine suburb that has known better days. It is no longer the home of the wealthy, its villas no more harbor the fashionables, its population consisting greatly of laboring people and fishermen. However, there are some notable objects in Versalles. The fine bridge across the Yumuri will lead you to the statue of Ferdinand VII of Spain, under whom the city was founded, and beyond to the Paseo de Marti, a promenade along the bay, that with a little outlay could be rendered very attractive. At the extreme end lies the old Castle of San Severino. Its lines were traced, where it now stands, the day after the first stone of San Carlos Church was laid, October 13, 1693, and its name perpetuates the memory of the founder of the city, Severino de Manzaneda. Fort San Severino is an interesting relic of seventeenth century military engineering.

Besides Versalles, one of the beautiful spots of Matanzas is the Playa, situated in Pueblo Nuevo along the shore with a long row of fine villas and gardens and splendid views. Rails have been laid for an electric line of cars to connect the Playa with Versalles and different parts of the city, but unfortunately the work was suspended.

THE FLOWING ROAD¹

AMONG recent accessions to the Columbus Memorial Library of the Pan American Union perhaps none is of more interest to the average reader who enjoys stories of adventurous exploration in wild and unfrequented regions than Caspar Whitney's *The Flowing Road*.

In the jungle regions of the interior of South America, especially in the great Amazon basin and that northern section of the continent drained by the Orinoco and its hundreds of tributaries, the only practical *roads* are the rivers, which form about the best means of communication and transportation in many thousands of square miles of territory. Hence the catchy and very appropriate title of the book.

Mr. Whitney is an adventurous traveler who has given to the world many pleasing accounts of his experiences in exploring comparatively unknown sections of North and South America, Mexico, Siam, Malasia, the West Indies, etc., and while he does not pose as a technical scientist in any of the branches of the "ologies," his descriptions of the wild life, ranging from the primitive human inhabitants he met on through the entire gamut of the bizarre in fauna and flora of jungle and stream, are always of interest to the general reader. He tells his stories in plain, comprehensive language, understood by the English-reading public without the aid of a scientific glossary, and while the trained naturalist, botanist, and anthropologist may find fault because of the lack of technical and scientific description, the vast majority of his readers will doubtless feel all the more grateful. He may not tell you that the *toucan* he so closely observed belonged to the *Pteroglossus* genus of the family *Ramphastidae*, but you know exactly what the bird looks like when he describes it, and that, to the average man, is the main point after all.

In the preface to his book Mr. Whitney confesses very frankly that his adventuring journeys into the wilds of South America were not actuated by any great scientific purpose, and he writes:

In the far southeastern corner of Venezuela roam a native people whom common report of the country declares to be savage and unknown. To have a look at these was the object of two of my most prolonged journeys—approaching on one occasion by way of the Amazon, Rio Negro, Atabapo, and Orinoco, and on another ascending the Orinoco and the Casiquiare. For the rest, I will admit frankly to have been impelled neither by a wish to hunt the beasts of the jungle (although such always served as my excuse for escaping the bounds of civilization), nor to report upon the economic, social, or industrial conditions of the land, nor even to add to the sum of knowledge of the scientific world; but solely to satisfy the horizon hunger which incites me every now and again to go and "see things"—that curiosity which Prof. Shaler has called the "primal instinct."

¹ *The Flowing Road. Adventuring on the Great Rivers of South America.* By Caspar Whitney. Philadelphia and London. J. B. Lippincott Co. 1912. Price, \$3.

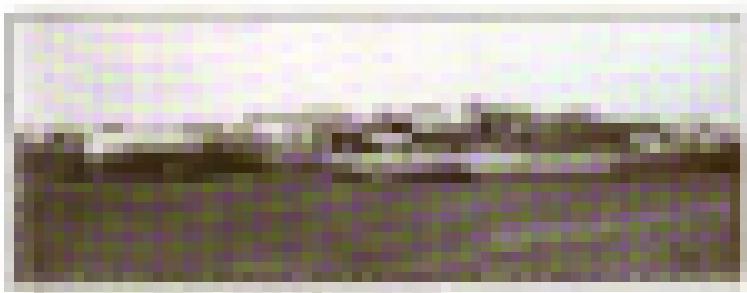


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In regard to the erroneous ideas which prevail in the United States relative to the hardships and dangers attending travel in South America, Mr. Whitney very plainly and sensibly writes as follows:

Much of this is due to newspaper dispatches inspired by self-interest and to magazine articles revealing a prejudice born of ignorance; some of it to the surface observations of casual tourists; and some of it to the travelers who seek to impress their valor upon home friends by coloring letters and tales fantastically with fevers, robbers, and reptiles. The three favorite themes of these vaunting rather than evilly disposed raconteurs are the audacious multitude of snakes, the malignant prevalence of fever, and the beauty universal of the "dark-eyed señoritas."

But this is not to infer that all travel in South America is luxurious or even agreeable. It depends on where you journey. To all the important centers you may go comfortably. You can ascend the Amazon, the Parana, the Magdalena, and the Lower Orinoco, to San Fernando on the Apure, by excellent steamers. In a sleeper from Buenos Aires, on the Atlantic side, you can cross the Andes through a tunnel to Valparaiso, on the Pacific. In comfortable railway coaches you can travel far in Argentina, see something of Venezuela, Chile, and Brazil, and in Peru and Ecuador enjoy two train trips reckoned among the famous of the world. Through all the sparsely settled interior you may go laboriously yet safely, so far as molestation by natives is concerned. But the great middle land is *terra incognita*. There are sections of the wilderness where you should not venture unless adequately supported, and in all wilderness South America the going is arduous in the extreme, frequently dangerous, and work only for the hardy and the experienced traveler.

In his book the author deals with five separate overland and river expeditions, embracing a continuous journey from Santa Isabel on the Rio Negro in Brazil to Ciudad Bolivar on the Orinoco in Venezuela; from San Fernando on the Apure to the headwaters and return of the Orinoco via the Atabapo and the Casiquiare; down the Portuguesa in Venezuela, the Apure, and the Orinoco to its mouth; and on the Parana, the Salado, and Feliciano Rivers in Argentina. The saddle trips included crossing the Llanos, which stretch between the Venezuelan north coast mountain range and the Orinoco on the south, and the Llanos and the forest to the east of Lake Maracaibo; skirting the Cordilleras at the east of Colombia; across the Andes into Chile; and some penetration of the pampas of Argentina and the forests of Brazil.

The first part of the author's journey up the Rio Negro, from Santa Isabel to San Gabriel, a distance of some 300 miles, was accomplished in a species of river craft called a batelão. The various types of boats and methods of navigation in use by the natives of northern South America are thus described:

Throughout the length of the flowing road canoes are of few types but of many names. The batelão, varying from 25 to 40 feet in length, with crews of from four to a dozen, is the long-journey cargo boat, corresponding in some of its phases to the "lancha" of Venezuela. In both countries it has a comparatively deep cockpit, covered, sometimes for half its length, sometimes wholly, with a barrel-shaped, thatch house—"toldo"—and is built of planks around a crude but strong framework, to withstand that hardest of usage—navigation among the rocks of the rapids. High up on the Guainia a species of crude bark craft obtains, but elsewhere the canoe of the Indian

is always a dugout, known as "uba" in Brazil and "canoa" or "curiara" or "bongo" in Venezuela, varying in width amidships from 18 inches to 4 feet and from 12 to 15 feet to as much as 30 or 40 feet in length. One I measured at Santa Isabel was 52 feet long, fashioned out of a single tree. Incidentally I found it somewhat curious that a Brazilian Indian when alone in a small uba often paddles from the bow rather than from the stern, as is the customary method among most native watermen elsewhere. Far inland the uba, fitted with toldo, is also the long-journey boat, but on the lower reaches of the Rio Negro, the Amazon, and the Orinoco one, two, or three board ribs are added to its gunwale, and the craft becomes, respectively, "montaria" among the Portuguese and "falca" among the Spanish-speaking peoples. The common boat of this description carries one 12-inch board rib atop its dugout gunwale, and is from 20 to 25 feet long. * * *

The large batelão is propelled by oars from atop the toldo or from its deck when smaller, or by tracking and poling. It all depends upon the character of the river and whether your course is up or down stream. In going down stream you keep the middle of the river to enjoy the full force of the current as you float, or perhaps sail along with a little easy paddling or rowing to hold direction and secure extra speed. That is the luxury of river travel; but going up is quite another story. In the middle of the river it is quite impossible to make way against the current, so you cling to the bank, following faithfully all the turns of a much turning river, except where a deep bay tempts a crossing—and you pull your heart out before reaching the bank again.

That patience is a virtue absolutely essential to upstream navigation in boats of this description is made evident from the following:

My batelão was large and heavily laden, and we progressed by a species of tracking and by pulling and pushing along the forest-lined bank—a method of poling peculiar to the flowing road. Seven of the crew remained on the boat, Alleo, of course, at the tiller, and two—changed daily, for it was much the easiest task—scouted ahead in the uba for rocks or points to which the hauling cable could be attached. Thus six men were always on the poles, divided equally as pullers and pushers. The puller used a 30-foot pliable pole having a natural hook at the far end; it was his business to fasten to some limb ahead, and, by walking down the length of the batelão, so help-drag us forward. The pusher used a 20-foot stiffer pole terminating in a short, stout fork, which by preference he fixed against the river bottom when he could reach it, or seated it against the limb of a passing tree. Sometimes as a pusher set his weight against the pole he went overboard amid the united shouts of the crew; and often there was a voluntary scramble into the water to capture a marsupial rodent, somewhat larger than a big prairie dog, and fair eating, which had been hooked out of a tree.

Of the natives who formed his crew on this portion of the Rio Negro journey the author writes pleasantly:

Whatever the method of progression, these Rio Negro Indians were usually cheerful; the best natured people I ever fell among. They were always ready with a laugh, often singing at their work—if the rain was not too severe; like children, as, indeed, most wilderness people are. If one of the crew missed an overhanging limb and fell into the river, if the uba was caught under the cable and upset, the others indulged in raillery. If the boat swung around at a rapid or broke away, requiring extra effort to repair the damage, everyone laughed as he set to the task. Had they, however, promptly jumped into the breach and laughed afterwards we would have made better time on the long journey at less expense of bodily effort. They had good nature and patience in plenty, but more alertness and instant application of energy would have given less need of patience. Their way was to laugh while they viewed the barrel roll downhill, and then set to work rolling it up again, rather than check its flight at the top of the hill.

From San Gabriel to San Carlos and thence to Maroa, the gateway of that fabled land El Dorado, the journey was accomplished by means of a small uba. Of the historic interest of this section the author writes entertainingly:

For the better part of two centuries, indeed, had the reported riches of this mysterious land been noised about the small world, calling soldiers of fortune to every gateway and putting in motion a series of daring explorations never since equaled. From the Meta River on the north to the Caqueta (a north branch of the Amazon) on the south; from the Andes Cordilleras on the west to the Rio Negro and the Orinoco on the east—so ranged the fabled land where gold and precious stones were said to await the successful adventurer. Von Huten searched the wilderness between the Guaviare River, which empties into the Orinoco at San Fernando de Atabapo, and the Uaupes, entering the Rio Negro just above San Gabriel. Ordaz, a captain of Cortes, in 1531 surveyed the Orinoco as far as Atures, the north end of the great cataracts; Herrera went up the Meta via the Orinoco four years later; Orellana in 1561 voyaged down the Amazon; Quesada hunted far to the west and south, even into Peru. And all the while the restless Caribs spread the fable along their voyages, which began at the mouth of the Orinoco and extended south to the Rio Negro.

What energy they had—those first pioneers and their immediate followers, who, so early as 1776 had built a chain of blockhouses reaching from San Carlos north to the lower Orinoco, across a country now rated as "unexplored." Their zeal and enterprise under the tremendous obstacles of forest and climate and insect pest is no less astounding than is the now complete abandonment of a region once so valorously secured.

Cutting across the country by means of paddling through one of the caños (natural waterways like our large creeks), Mr. Whitney emerged into the Casiquiare and thence continued to the upper Orinoco. One of the striking features of the rivers of this section of the country relates to their variously colored waters, of which the author writes:

One of the phenomena of this land of waters is the retention by each river of its own color without diffusion to the very point of actual contact, even where the rivers differ vastly in volume. Black waters flow into white, and white empty into black, retaining their individuality up to the very edge; a visible line of demarcation—on one side white, on the other side black, unmixed and unexplained. Thus the puny black Atabapo joins the surging white Orinoco with no loss of integrity; the black Negro receives almost at right angles the odious white Casiquiare without contamination, and itself empties into the Amazon, not so much as tingeing the mud-colored waters of that monster river. Humboldt reports on the lower Casiquiare, which I did not visit, a black and a white stream, both coming from the east; while of the rivers flowing in from the west, some are of white and some of black water. Dr. Hamilton Rice declares the upper Uaupes to be white, while the lower section in granite districts is black water, as are also two tributaries, one coming in from the north, the other on the south. Of the number of small streams coming into the upper Casiquiare from the east, those I noted were olive.

Of the interesting bird life to be found along the banks of the upper Orinoco the author gives us descriptions like the following:

Where the river straightened out we kept close to the hotter course inshore to avoid the rougher water, thus losing much of the current's help, but partly recompensed

the most common cause of death in the United States is heart disease. The second leading cause of death is cancer. These two diseases account for more than half of all deaths in the United States.



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As a result, we can conclude that the main factor influencing the choice of the type of the system of control of the production process is the level of automation of the production process.

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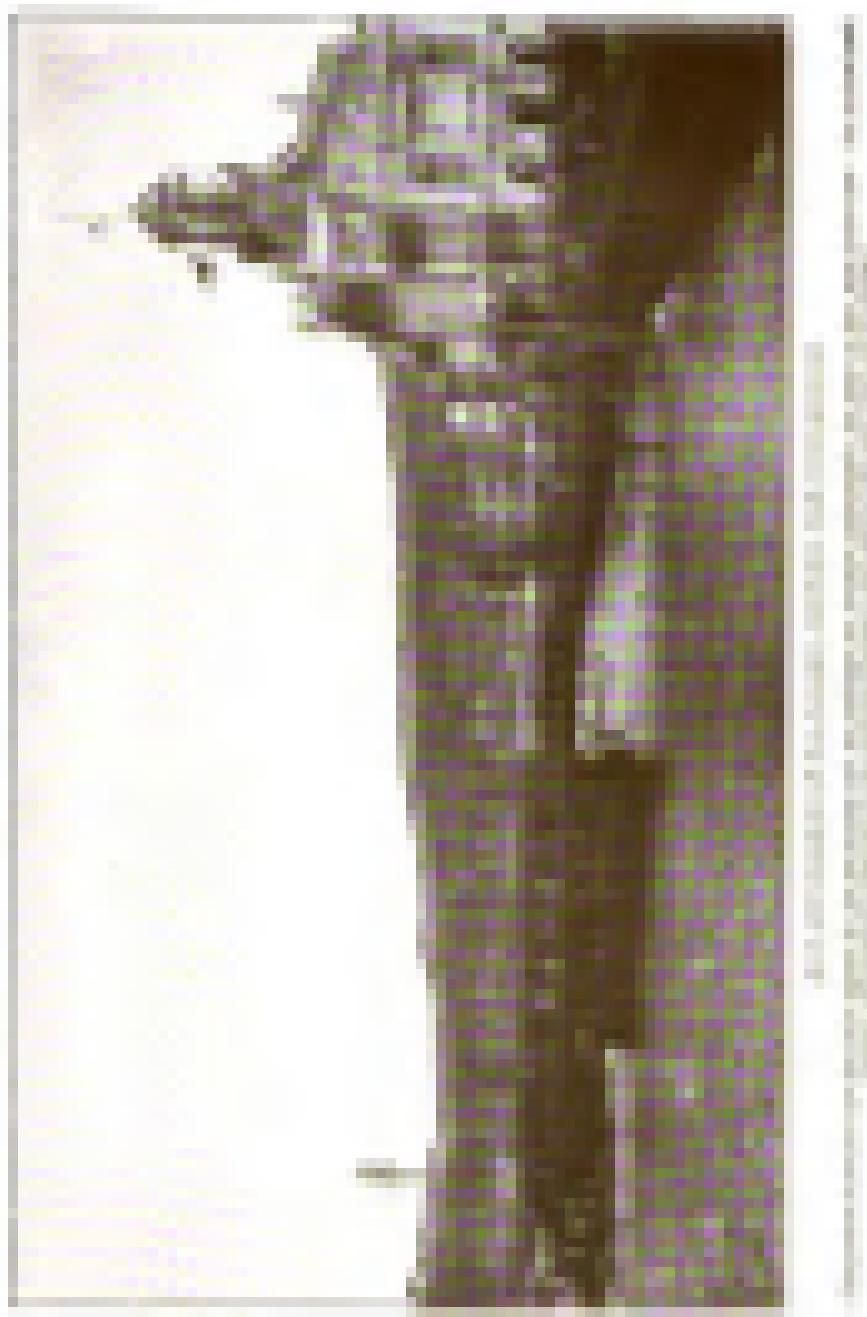
A COMMERCIAL TRAVELER IN SOUTH AMERICA :: ::

MENDOZA, ARGENTINA.

DEAR MR. EDITOR: I have intentionally selected this place from which to send you my fourth letter on my trip in South America, because Mendoza lies about half way between the east and the west coasts. It gives me a chance to take a breath, so it would seem, and to check up my experiences on the one side before plunging into new ones on the other. Friends who knew the field better than I do, and acquaintances I have made since I left "The States," tell me that there is a difference between the west and the east. I can understand this condition, because the east coast has for generations been in quicker touch with Europe, and had, moreover, a wave of immigration which left an impression along the shores of the Atlantic. Chile is the only Pacific country to be so affected, as I found out in the south of that Republic, where the Germans are. Therefore, after I have given you my interpretation of local conditions in Chile since my last letter was written, I shall try to sum up the west coast before I go on beyond here.

The thing I needed most after landing at Valparaiso was some money. Coming down from La Paz, and so long as I was in Ariea, my gold sovereigns and a banker's check were all sufficient; but as I had quite a campaign before me, I knew it was best to apply at once for a draft on my letter of credit. Valparaiso has many banks, and a letter of credit is easily recognized by them.

Chile has two kinds of pesos, those used for financial transactions on a gold basis and the ordinary currency in which all commercial transactions are reckoned on a paper basis. There is in reality no use made of the gold peso (although I believe that such are actually coined), which is on an invariable value of \$0.365. All payments at the bank are made in terms of the paper peso, which can be estimated for hurried calculation at about the value of 20 cents United States gold. The first draft I made was for £30, and gave me in paper 715.50 pesos; reckoning a sovereign as worth \$4.86, this value of each paper peso was very close to the 20 cents. The bank's quotation was thus: @10 1/16, which means a peso had an exchange value at the rate of $10\frac{1}{16}$ pence. I advise every traveler to become acquainted with this style of quotation—in pence. The newspapers in their financial or commercial columns give regular quotations of exchange, and all of the banks, together with some of the important business houses, display in a conspicuous place a blackboard with the



quotation upon it. By keeping track of the quotation of the peso the understanding of any commercial transaction becomes much easier. Although in times past the peso in Chile has fluctuated rather violently, so I am told, at the present day its exchange is held quite steadily around the above figure.

My first impression of Valparaiso was of astonishment. It seems like a new city. And, moreover, my preconceptions of the place, founded upon my earlier readings, which had pictured it to me through my Latin eyes, were not upheld. Valparaiso, essentially Chilean as it surely is, was nevertheless, as I first saw it, by no means simply Latin American. It had a distinctly cosmopolitan aspect and atmosphere. It is what the Germans call a "Welthafen" in every sense of the word.

I am always amused when my preconceptions are so jarred, and I search my mind to discover, if I can, the reason for it. In this case I suddenly came across the explanation as I was riding on the top of a tram (trolley car) going out to that part of the city which suffered most from the earthquake of 1906, and which therefore has been most restored by the enterprise of the local municipality and by the support of the nation as a whole. "Your entire Latin-American experience," I said to myself, "has hitherto been in the Tropics. All of Mexico and Central America and the islands of the West Indies are tropical, and you have become too accustomed to the tropical idea of Latin America. You'll make a fool of yourself if you don't get into your head at once the feeling that Valparaiso is in the Temperate Zone. Why, man, the place is on the same latitude as Charleston or Los Angeles, and here you have been thoughtlessly imagining for Chile characteristics as you know them in Panama. Stop it, and interpret facts as they are."

This is good advice to all travelers, whether they come to South America for pleasure or business. One's attitude of mind must be kept unprejudiced, or unfortunate mistakes will be made. The busy cosmopolitanism of Valparaiso, however, soon becomes the feature that dominates everything else in studying the town. I myself spent hours and hours riding about the city or going up the hills to get a proper glimpse of the harbor; and probably even more hours in walking from one end of it to the other, so that I might be able to sense the activities and the habits of the people. Not until I had acquired a reasonable familiarity with Valparaiso in particular, and in this way of course with Chile in general, did I feel competent to approach those whom I hoped to make my customers.

Valparaiso buys and sells almost all there is to sell or to buy. I do not believe that I would except even snowplows. My knowledge of the entire commercial world may not be big enough to make me an authority on the matter, but I would not hesitate to bet on that



Photo: Michael Hickey / Getty Images

statement, Mr. Editor. Chile needs much of what is used in the Tropics over her northern areas; she needs much of what is used in cold countries over her southern territories and Tierra del Fuego; and of course she consumes everything needed in the Temperate Zone, because there the bulk of her population lives. Valparaiso keeps a finger on the pulse of the demands of consumers throughout this diversified region, and loses no chance to supply what may be wanted. Yes, indeed; the man who knows how, can sell practically everything in Valparaiso or in some part of Chile.

I do not mean to declare that all sales can be made in large quantities. That is a matter which can be determined only by the experience of each individual, and whether the field is large enough to warrant the expense of the trip down here. I do know, however, that the purchasing power of this stretch of South America is far beyond my expectations, and that I am satisfied that Yankee-made goods have here as fair a chance as may be found in any part of the world. It needs push, persistence, and patience to make them accepted, however. They are not the only goods, manufactured or otherwise, offered in this attractive market.

Let no one rest under the delusion that he will have no competition to meet in Latin America. There is hardly a manufacturing country on earth which does not look with longing eyes upon South America. In the shop windows of Valparaiso I have seen English, German, French, Swiss, Austrian, Spanish, Italian, and Japanese wares exposed for sale. I do not doubt but that, had I looked more carefully, I should have found articles from Norway and Sweden, from Russia, Greece, Africa, China, and the East Indies. There are strong resident representatives of foreign houses in Valparaiso, and a substantial business is done by them, both in filling and in taking orders. They have close association with the banks, and they understand the routine of commercial matters here in a way to make the beginner, like myself, pause to admire their establishments and to inspire him with a firmer faith in the future of this west coast.

A few days ago I happened to read an article in one of my home papers on the lack of aggressiveness of the North American merchant, as compared with the methods stated to be characteristic of Europeans. This might have worried me here in a territory new to me, if I had not just finished reading a somewhat similar article in an English report complaining of exactly the same inertia on the part of my British cousins. I can not convince myself, Mr. Editor, that either complaint is thoroughly well founded. British manufacturers have had this field for scores of years. They have their clientele, and have developed it over three or four generations back. The English have large interests in the countries; they invest money here, and they buy quantities of natural products for consumption



PIKES PEAK MOUNTAIN RAILROAD

The Pikes Peak Cog Railway is the world's first and oldest cog railway. It has been operating since 1890.

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at home. They keep traveling men on the road, and they study the markets with a keen eye. For a week now I have been chummy with a nice Englishman who is making a tremendously long trip over Latin America (his firm sells high-grade machinery) and he is as modern a fellow as I wish to know. And there are plenty of others of his class all over the world. If, however, fault is found with them because they do not adopt the methods of the aggressive Yankee salesmen, it is not aptly applied. I am more afraid of the English competition, so long as he remains an Englishman, than I would be were he to try to be something else—a German or a Yankee, for instance.

Now, the same judgment on the style of my own countrymen can find the same application. He must remain a Yankee, retaining the best qualities that have made his salesmanship respected elsewhere, but he should learn to soften some of his mannerisms so as the better to understand and to be understood by the people with whom he hopes to do business. If he learns a trick by which his honest competitor profits, if he finds that by changing his style—as, for instance, by extended credits or by modifying his goods to meet local requirements—he more easily reaches those he hopes to interest in his goods, then let him by all means drop some of his provincialism. But for Heaven's sake he must not cease to be a Yankee. He can no more be a Britisher than can the Britisher be an American. The fault lies not in the methods adopted—and nobody can teach the salesman from "The States" how to sell goods—but in the man selected to sell these goods in a foreign market. This first step is the all-important one, believe me. The man can develop the method, but never can the method make the man.

Perhaps I have overstepped my license, Mr. Editor, in speaking right out like this, but it is what lies nearest my heart. I want to see our commerce extended in South America; I want to have the world better acquainted with the splendid products of our Yankee brains—and I am, in my own small way, helping in this direction—but I can not resist the temptation to contravert a criticism that has of late been too freely uttered. This market is already vast. It is growing steadily. It will be greater as commerce makes use of the Panama Canal. But we shall never gain a permanent foothold in it by weakly and slavishly trying to pattern after the methods of others. Of course, we can learn from the good example and experiences of those who have been longer at the game, but we must be Yankee in the best sense of the word, through and through.

From Valparaiso to Santiago is a journey of nearly 120 miles, and is made by express trains in four hours, by accommodation trains in about six hours, and by a night train with a sleeper in seven hours. The stranger who wants to see the intervening country

should take the slow train, for it goes during the best part of the day and carries the most interesting lot of passengers. From the car windows there are some lovely views on the way, and then one has the pleasure of a leisurely pause at the junction of Llai-lrai, where the line begins which goes over the Andes to Argentina. There is talk of an electric railway to connect Santiago and Valparaiso, and this seems a practical proposition, but I shall never regret having traveled over this long-established route between the nation's capital and its principal seaport.

Santiago is in its way quite as absorbing for the commercial traveler as is Valparaiso. In fact, from this present experience of mine, I should advise that the two be kept closely associated. It might be well to come first to Santiago, after only a day or so in the port, and thus to return occasionally to Valparaiso, after studying conditions in the capital. Most of the large commercial houses have representatives in both places, and their business may have much in common. This must always be borne in mind, so that no hesitancy should be felt in going back and forth between the two if there promises to be any gain thereby. Railway fare is cheap in Chile anyhow, so that the item of expense need be of small importance.

All southern Chile is accessible through and from Santiago. Distances are not very great—the trip to Valdivia is a matter of only 24 hours—and I discovered that I could take a sleeper when I returned from any trip, thus avoiding the necessity of going over the same ground twice in the daytime. I found that at least three points were very well worth my while in this southern country, and these were Talcahuano, with Concepcion (which are almost the same thing), Valdivia, and Puerto Montt. They represent three centers of commercial activity, and without knowing them the traveler has failed to estimate the market Chile may offer him. Talcahuano is a little over 12 hours from Santiago, and Valdivia about the same distance farther on; Puerto Montt is only a few hours from Valdivia. All three are on salt water (Valdivia through its port of Corral), and therefore receive by direct shipments much of their imports from abroad. Nevertheless, they should be visited, because they do not always order directly through importing or exporting houses, and even if that is their custom, it is no reason why an effort should not be made to interest their importers in our products.

There are, of course, within this wonderful central valley of Chile numerous other cities and towns which deserve study, and which in the long run ought to be visited, but those I have mentioned will suffice for the first trip. No man can pretend to exhaust this territory during three or four weeks of effort. He must be satisfied to learn the ground, to get a line on what the market is and what direction the consumption of the general public appears to take. This

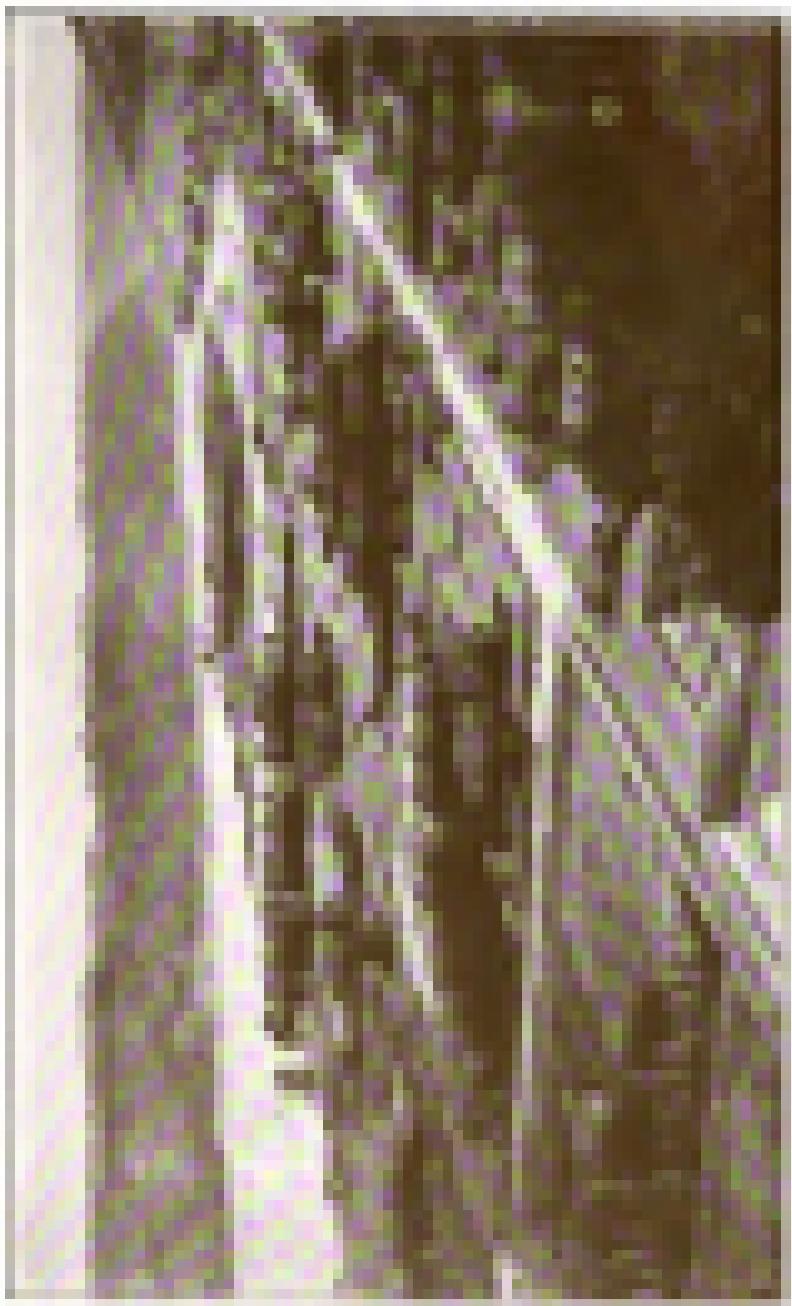
is an agricultural country, with a population largely of country folk, some descended from the ancient Indian stock, but toward the south a good foundation of Germans. There is also quite a noticeable amount of manufacturing for local demands such as a local industry can best meet, and therefore the market is diversified enough to stimulate the activity of any man with an article of which he is proud to sell.

I might keep on with many more suggestions about Chile, but I think that this is a good place to present a résumé of my impressions of the west coast, and they are based on pretty extensive experience, not mine alone but that of several travelers with whom I have exchanged gossip on the road.

There is an air of expectancy over this entire region, due to the approaching influences of the Panama Canal. No one can foresee with exactness just what is going to happen, yet everyone knows for a certainty that changes will take place when that new waterway is opened to commerce. This problem of the future is affecting business, and modifies all plans for future action. I know that after I had become acquainted with wide-awake persons in every city I visited the question most asked of me was, "When will the canal be opened?" and "What is going to be the result of the radical change of commercial routes brought about by the canal?" Back home in "the States" newspapers and magazines are full of discussion of these matters. Speculation and fact crowd each other in almost every publication, and all agree that a commercial revolution is bound to happen. But the west coast of South America is one of the great areas toward which this new commerce will be directed, and here on the spot it is very easy to understand why this feeling of expectancy is so deep seated.

I can not pretend, Mr. Editor, to give you anything like a summary of the opinions I have heard expressed by both natives and foreigners of the probable consequences of the canal on this west coast. In fact, opinions are less to the point, as far as my own work is concerned, than recognition of the existence of this hopefulness for the future. Only a very few skeptics and conservatives doubt the ultimate good that must come from the canal, the almost unanimous conviction being that within a reasonably short period after the canal gets going all Andean South America, from the Isthmus to the Strait of Magellan, will profit permanently therefrom. I had this deeply impressed on me. I may have had an inkling of it when I left home, but I needed actual contact with the peoples and the markets here to make this impression one of the strongest of my trip. Looking back, I can see that that is the reason I am here—to study the field in anticipation of the opening of the canal.

For that reason, too, others should be doing likewise. Yankee salesmen are seen more frequently to-day than was the case six years



ago. I have met several, and the majority of them are fellows I can respect and admire. But there ought to be more of them. They should get acquainted with the opportunities in South America; they should acquire detailed knowledge of trade and other conditions here; they must lay their plans for fixed, permanent, and confident relations with the merchants of these countries. Now is the time to do it. When and where everyone is expectant, then and there is the time and place for personal action. Without the exact knowledge gained in a personal way, no progress in foreign trade can be expected, and if we are not so represented on the ground before the canal opens, we shall be years behind the rest of the world after the new trade routes are established. Certainly South America is not going to wait for us to laze along in getting ready to do a thing that others are eager to do right away. That would be mañana with a vengeance.

But South America is not the country for the little man in any sense of the word. Things are big here. The country is big; business is big; ambition and execution are equally big. What is done, what is projected, is on a big scale. The manufacturer of limited output can not, therefore, look upon this market as accessible to him. I do not mean that there is no demand for little things, or that retail sales are unprofitable; but that taking into consideration the cost of going after the business, the way it is conducted here, the credit system, and the distance from the place of production, there is no room for profits unless the account of orders runs high into the thousands.

Take the matter of expense, for instance. I spent a week going to Panama; 3 days, say, on the Isthmus; 4 days to Guayaquil; 2 weeks (and not time enough) in Ecuador; a month in Peru; 3 weeks in Bolivia; a month in Chile; and here I am, not half way around the continent, after 15 weeks of travel. Even then I left out much that I should have liked to visit, and could only check them out for another trip. I might have shortened the time to 12 weeks by jumping from one capital to the other, but this would have been at the risk of my health and surely of my business. On the other hand, I feel that I would have gained by prolonging my stay in some places even beyond the allotment just given. Much of this time was taken in traveling, to be sure, but no miracle of mine could have saved one moment either on sea or on land.

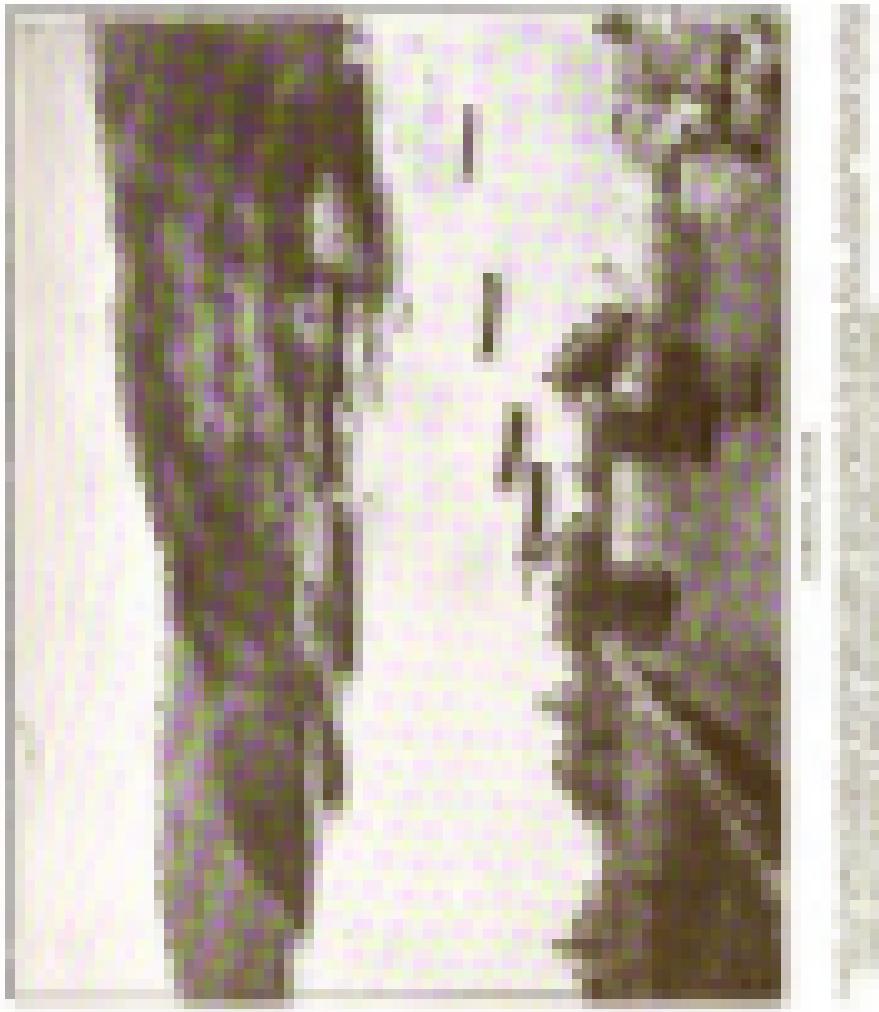
This travel by steamer and railway, however, has its compensations. I utilize the leisure it affords to keep my accounts straight and to plan ahead. The enforced semi-idleness of the journey is restful for me, I confess, for I should be tired out too soon if I kept going from day to day with no intermission whatever. I find that nowadays in South America there are very few places off the railway, and that my saddle rides of the old days in Central America are not to be repeated here.



Even there the railway is rapidly sidetracking the patient mule and the oxcart, although several goodly sized cities still remain for this leisurely means of locomotion. But such places are still fewer in South America (so far as I have been), and he who goes over the ground for the first time will find that he has his hands full without any detours (*desvios*) off the railway. Travel is pleasant on most of the lines I have been over; the cars are comfortable, the scenery attractive, and the care of the passengers satisfactory. It is my opinion that the man who can not make himself comfortable in both steamer and train in what parts of South America I have seen had better stay at home, for he will unjustly find fault with other things.

As to the hotels on the west coast I can not speak with the same approval. They are, in a word, old fashioned. The cooking is good, as it always is in Latin America, whether the proprietor be Spanish, Italian, German, or French, and I have met all four. Only one of the many buildings in which I have stayed seemed designed for a hotel, however, and it has been necessary therefore to resort to make-shifts to meet the increasing requirements of the traveling public. I could always get a bath, nevertheless, and the mere creature comforts were never lacking; but the hotels are relatively cheerless, and I missed that club-like atmosphere which is usually noticeable in the better class of hotels in the Tropics.

In the matter of expense I could not complain. Prices range from a rate of about \$2.50 (United States gold) a day up to \$4, and any higher charge will be only for the room or suite of rooms occupied. This includes the morning coffee and rolls, served in the room by the floor servant, for in rare cases only is the dining room (*comedor*) open for that purpose; the regular breakfast toward noon, which is a hearty meal and consumes at least half an hour in serving; and the dinner any time after 5 o'clock. In Chile I met the curious custom of charging extra for the morning coffee. Of course, the floor servant brings it just the same, but it goes onto the account as an addition to the rate charged for the day, and one ignorant of this practice may be confused by the disagreement between his estimate of his hotel bill and what he has to pay when the settlement comes. Yet in this very matter of hotels I caught the feeling of expectancy mentioned a few lines back. In every city I visited the gossip of the club revolved around the probability of a new hotel "when the canal was opened." It was a safe topic of conversation, for everybody was interested and nobody was hurt by a dispassionate statement that there was room for a new hotel. My experiences in various parts of the world was often asked, and I am sure that I never gave offense by saying that such an institution would be welcome, and should be one of the features of the city. Still, when all's said and done, I have come through these 15 weeks in perfect health, and that to me is the



best test of the treatment I received. I have dwelt on this point only to forestall any criticism that might be brought against the BULLETIN to the effect that it did not prepare the traveling man for what he should expect.

And now, Mr. Editor, I am going to allow myself the liberty of writing about a side trip I took from Puerto Montt, but which had nothing to do with my business affairs. I simply had a holiday's outing, to see and to enjoy the wonderful lake region which lies so close to that city in southern Chile. I took this trip altogether for the pleasure of it, yet I feel that the time was not lost, because it gave me a chance to know and to appreciate something in the country, and I am convinced that knowledge so gained gives me a ready means to establish a friendship with those I hope to interest in my goods. This is true of any and every part of Latin America. The more one learns of the country, its beauties, its history, its traditions, and its daily life, the better received will one be by the people of that country. I have always found it so. But this is also merely an argument in support of my indulgence in a holiday. I shall never regret having taken it, and I strongly advise others who may be in this part of South America to snatch the opportunity to see in its pristine glory one of the beauty spots of the world.

Puerto Montt is the southern terminus of the Central Railway of Chile, or what is sometimes called the Longitudinal system, which runs all the way to Iquique in the extreme north and will soon reach as far as Arica, a distance of about 2,000 miles. Below Puerto Montt lies the forest region, rich in certain natural resources, so I am told, but not yet opened much to settlement or business. Just 21 miles north of Puerto Montt is the small almost German village of Puerto Varas, on the shores of what is said to be the largest lake in South America, Lago Llanquihue. Varas is as pretty a little lakeside resort as I ever wish to see. It has many villas of the Swiss or south German type, several comfortable hotels, a pier running out into the water, and a swarm of boats of all kinds ready, during the season (say December to April), for service. Along the sandy shore are pleasant walks and drives, while the surrounding hills, heavily wooded where the rocks will permit a vegetable growth, offer many a pleasant excursion for sightseeing or adventure.

Lake Llanquihue is picturesque, like Lake Champlain, or Lake Geneva, in Wisconsin, or scores of lakes in our own north country. The water is clear and fresh, the shores are gently sloping, while here and there summer cottages peep out from between the trees, or will peep out when the lake becomes better known as a summer resort for all Chilenos who may prefer the interior places to the seashore. Yet it has one great advantage over any of the lakes in the United States, an advantage that can be rivaled only by those in Switzerland.



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I mean that across the water, stretching far to the north and south, are the white-peaked Cordilleras, and directly to the east is that wonderful volcanic cone, its head crowned by eternal snows, known by the name of Osorno.

Osorno, among all the beautiful mountains of the Chilean Andes, is the loveliest jewel. It stands alone, as if thus to give the spectator a still deeper appreciation of its beauty. From its summit this glistening white broadens out to about halfway down to its base. Where the line of vegetation meets the snow, there is a soft gray fringe, and then the color becomes an intenser green till it is merged into the woods and fields that take up the surrounding landscape. All this beauty is isolated. It forms a picture which the eye can take in alone and by itself as if cut out by the shutter of a camera. And then to cross the lake, a distance of about 30 miles, to the landing place of Ensenada is to find these absorbing impressions intensified a hundredfold. This quiet semi-German farming village nestles almost under Osorno, and one can feast upon the sight of the graceful mountain with never ending delight. Fujiyama, in Japan, Mount Rainier, in Washington, can be compared to Osorno, but I will not admit that they are more beautiful. The former has the more romantic associations; the latter means more to us who love our northern America; but with all my loyalty, I am willing to grant that neither of the two can surpass in beauty and natural fittings the gentle and yet imposing Osorno.

There are other snow-clad mountains (volcanoes, as they are called in this part of the world) near by. Tronador is well worth acquaintance; Punta Aguda a second, with lesser peaks to north and south. There are other lakes, too, within easy reach of Llanquihue, and I continued along the road, by horseback, skirting for two hours my fascinating Osorno till I reached Lago Esmeralda—or, as it is called in the geographies, Todos Santos—an equally charming body of water, but less known even to the tourist, and lacking the traces of habitation along its shores which makes Llanquihue seem less sequestered.

I should like to have gone farther, for I found out that there was a good steamboat service across the lake and a decent road through the forest where I might come out upon the divide and thus set my foot upon Argentine soil in the anciently known region of Patagonia, but I felt that I had come to the limit of my holiday. I was rested, and eager to get back again into the worry of my work, so I retraced my path, again on horseback, around Osorno to catch the steamer for the 30 miles to Varas. It was a delightful two days' flitting into the unknown. Counting two more days I gave to Lake Llanquihue, my outing had cost me only four days in all, and with an expense of \$25 (gold) at most. Don't you think it was worth the price?



Photo: Steve Lohr

The steep, rocky mountain slope above the town of Ouray, Colorado, is where the first major U.S. oil shale project was built.



Photo: Steve Lohr

The steep, rocky mountain slope above the town of Ouray, Colorado, is where the first major U.S. oil shale project was built.

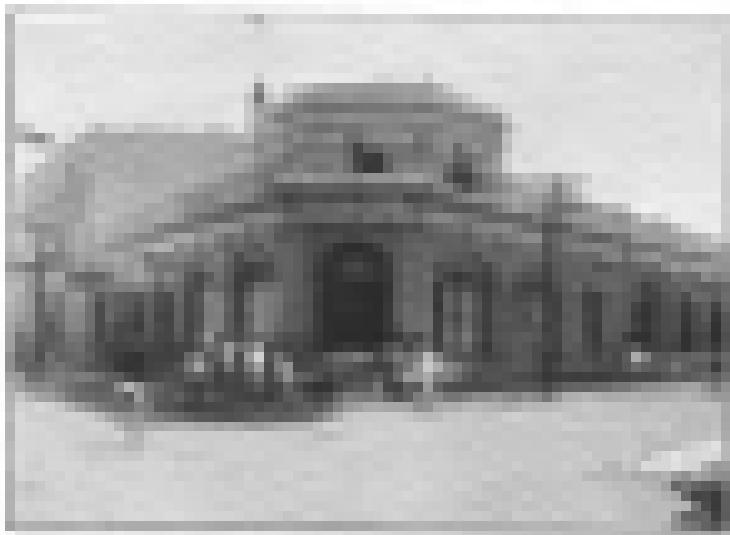
If this letter of mine is read by anybody coming to Chile; if the traveler or tourist wishes to get off the beaten path, to catch a glimpse of what nature has to offer along these lower ranges of the southern Andes, let me give the advice to spend a day or better a week in this fascinating lake country of the Republic. It can never be regretted; it will add immensely to the true interpretation and appreciation of our neighbor who will soon be in closer touch with us; and when home again it will give something to talk about far different from the stale comparisons of city life, foreign customs, and national characteristics, so apt to be misunderstood by those who get but a hurried view from the hotel window. Nature is always nature, no matter where you find her. It makes us all more human to realize that we are on the same earth and only in different latitudes. I even advise business houses sending their own commercial travelers into new territories, to insist that such representatives spend some of their time and money in side trips just as I have done. Do not demand that that be always and forever on the business. In enjoying themselves they acquire capital for their conversation, and that is by no means a stock in trade to be ignored.

When the lakes of Chile—those so close to Puerto Montt and others within an easy distance from Valdivia—become better known, I predict an immense popularity for them. Tourists from the Republic itself, from the northern countries, and even from the United States will flock there. The climate during the dry season is so agreeable and healthy, the waters so attractive and the scenery so beautiful, that the region will rival the English or Scotch lakes, and even those of Switzerland, in their varied attractions. They tell me that Argentina also, on the eastern slope of the divide, has equally beautiful sheets of water, deep, green valleys, and scenery similar to what I have attempted to tell about; but that will make the trip all the more charming, because as travel increases so will the facilities be increased, and it will therefore be a matter of easy arrangement to pass from one side of the Cordillera to the other and to see both Chile and Argentina on the same tour.

Now, Mr. Editor, I suppose you are saying, as you read my fourth letter, "What the dickens has all this to do with a commercial traveler in South America?" Let me reply that it has a great deal to do with the success or failure of such an individual. Many things I am leaving out, to be sure. I do not tell the time the trains leave, or what day to catch a steamer. I do not tell what is my own line line of goods nor what class of customers I interview. I say little about bad packing, less about money matters, and nothing at all about credits, ratings, or the collection of accounts. These are all subjects discussed in consular reports, in the information given by chambers of commerce, or even in your own useful volume on the

Pre-arranged Encounters: It might sound like you're setting up a forced interaction between two people, but you can still make it look natural and organic, and that's what it is the point of this type of sales pitch really.

For the first time, the Committee had a free hand to do whatever it wanted to do. The members were given absolute power. I was very anxious to make things right again. I did not feel I could have done more to help them. The people were very grateful.



A horizontal color bar consisting of a series of colored squares arranged in a gradient from light gray to dark gray.

1. *Leucania* *luteola* (Hufnagel) *luteola* (Hufnagel) *luteola* (Hufnagel)

This is the most general notion of a group. It may include the following properties:

10 of 10

NOTABLE PAN AMERICAN CONGRESSES

ELSEWHERE in this issue of the Bulletin mention has been made of various congresses of international importance which will assemble during the closing months of the present year.

Of these gatherings three are distinctly Pan American in scope and character and will be attended by representative delegates from the 21 independent Republics of the Western Hemisphere.

From the standpoint of international relations and better understanding it is but natural that the Fifth International Conference of the American Republics which will be held at Santiago, Chile, in November, 1914, should occupy a place of first importance. These gatherings have already met four times since their inauguration in 1889 by the then Secretary of State of the United States, James G. Blaine, and have been responsible for the development among the American nations of a desire to become better acquainted, to have closer and more intimate associations, to effect a broader social, intellectual, and commercial exchange, and thus to bring about a Pan American spirit of influence and prestige.

It was, moreover, the first of these conferences, held at Washington, in 1889, that resulted in the establishment of the International Bureau of American Republics, now known as the Pan American Union. The benefits resulting from this organization have been sufficiently great to merit a broadening of its scope by succeeding congresses.

The feeling of cordiality and sympathy which the first Pan American conference developed among the delegates and their respective countries made it the opinion of all those Governments that such conferences should be held periodically. Accordingly, the second of these congresses was called together at Mexico City in 1901-2, and four years later Rio de Janeiro was the scene of the third. In 1910 the fourth Pan American Conferences met at Buenos Aires and there the labors of the previous sessions to advance the cause of international arbitration and universal peace received fresh impetus and further advancement.

Furthermore, the coming together at these meetings of the notable delegates from each of the countries, men of high statesmanship, of skillful diplomacy, and of broad visions, has had a tremendous effect in welding together the bonds of peace and friendship among the nations represented. Meeting on a basis of strict equality, smaller and larger nations alike, the delegates calmly considered and discussed

matters of common interest. With each successive gathering the Pan American Union has received new encouragement and greater strength. Its work and field of influence have been enlarged and its importance has been fittingly recognized.

The gathering at Santiago will be especially noteworthy for many reasons. First of all the progress which has been made in the four earlier conferences will facilitate the work of the fifth; the experiences gained at the former meetings will count for much in the discussions of this year; the results should, therefore, be far-reaching in their effects and significance. Secondly, as a special recognition of the importance with which these conferences are regarded by the United States Government, Secretary of State Bryan has accepted the invitation of the Chilean Government to attend. This invitation was also openly extended by Señor Don Eduardo Suárez, the Minister of Chile, at the meeting of the Governing Board of the Pan American Union, on March 4, in the following terms:

I have the pleasure to inform my colleagues that, in accordance with express instructions received from my Government, I have had the honor to convey to His Excellency the Secretary of State, as the Chairman of the Governing Board of the Pan American Union, a special invitation to be present in Chile on the occasion of the meeting of the Fifth International Pan American Conference. In conveying that invitation to His Excellency, I added that my Government considers that the presence of His Excellency in Chile on that opportunity, he virtually being the highest expression of Panamericanism, would intensely contribute to the prestige and the splendor of the conference, and invigorate the sentiments of American confraternity that inspire the gathering. In the like manner, and notwithstanding His Excellency not being a formal member of the conference, His Excellency could cooperate with my Government to the greatest success of its deliberations. It has been for me a great honor to receive the acceptance of the Secretary of State, and it seems to me that this information is of some interest for the other Governments, and that is the reason why I have given it.

The program of the conference will include the consideration of a number of interesting topics. Among them are:

Consideration of the application in each country of the conventions and resolutions of the Fourth Pan American Conference; results accomplished by the Congress of Jurists which met in Rio de Janeiro with respect to the codification of International Law; definite organization of the Bureau of American Republics; solemnization of the opening of the Panama Canal; measures designed to prevent the propagation of diseases; possibility of signing conventions based on the resolutions adopted by the International Sanitary Conferences of the American Republics; analysis and consideration of the conventions and resolutions adopted by the former conferences; cooperation of the Governments in the construction of the Pan American Railway; interchange of university professors and students; adoption of measures for the repression of anarchism in the countries of the Pan American Union; declaration as a principle of American policy, that aliens do not enjoy other civil rights nor other recourses than those guaranteed by the constitution and laws of each country to the citizens thereof.

Another congress of particular importance to medical and scientific students in the American Republics will be the Sixth International

Sanitary Conference. This will meet in Montevideo, Uruguay, December 13-21, 1914, and will be the medium of bringing together an array of prominent scientists and investigators interested in the promotion of the highest standards of sanitation and hygiene for the Western Hemisphere.

The good health conditions in the majority of the countries of North and South America, together with the continual improvement in sanitary matters, especially in coastal towns and harbor fronts, demonstrate the practical value of these scientific meetings. At the last conference, the fifth, held at Santiago, Chile, November 5-11, 1911, no less than 18 of the 21 countries were ably represented, a number of them sending 3 or more delegates.

The First International Sanitary Conference was called together at Washington, D. C., December 2-4, 1902. Eleven of the Pan American countries sent delegates. The organization of this particular conference was new and its usefulness uncertain. But this doubt was dispelled in the early sessions, and the salutary influence promised by these meetings brought together more countries and more delegates to the second conference, also held at Washington, D. C., October 9-14, 1905. The continued appreciation of the importance and even necessity for sanitary developments was manifest by the wide range of subjects considered at the third conference at Mexico City, Mexico, December 2-7, 1907, by the eminent physicians and surgeons present. San José, Costa Rica, was the seat of the fourth sanitary meeting from December 25, 1909, to January 3, 1910, and paved the way for the large representation and attendance of the fifth conference at Santiago, Chile, referred to above.

The other Pan American conference, similar in organization to those already described, is the Fourth International Congress of American Students. These gatherings which originated in South America in 1908 have been held biennially ever since and are anticipated with much eagerness and pleasure by the student bodies of America. Because the previous congresses have all been held in South America the distance from the United States has prevented as large a representation from this country as would have otherwise been the case. But distance is no longer a barrier to the development of friendly relations and international intercourse. The wholesome interest everywhere evident in our sister republics to the south makes this distance an added charm and quickens the desire to visit and see these countries and mingle freely and intimately with its peoples.

From the numerous inquiries which have come to the Pan American Union requesting information and details of this Fourth Student Congress at Santiago, Chile, probably in September, it may safely be stated that never before has there been such a widespread and genuine interest in such a gathering. Colleges and universities are bestirring themselves and selecting delegates to constitute the representation

from the United States. A dignified and representative group of students is the desire of those interested in the success of the gathering. From the universities of the Latin American countries, from Mexico south to Argentina and Chile, there will be sent the promising youth of those institutions. Judging from the caliber of the splendid delegates who came from those countries to the Eighth International Congress of Students at Ithaca during the past summer the success, practical, educational, and social, of this fourth gathering should equal its predecessors held at Montevideo, Uruguay, in 1908; at Buenos Aires, Argentina, in 1910; and at Lima, Peru, in 1912.

SIXTH INTERNATIONAL SANITARY CONFERENCE

IN accordance with the resolution adopted at the Fifth International Sanitary Conference, held in the city of Santiago, Chile, from November 5 to 11, 1911, the date, December 13-21, 1914, has been fixed for the assembling of the Sixth International Sanitary Conference in the city of Montevideo, Uruguay.

The following official correspondence in regard to the call and the provisional program of the conference is printed in the interest of the conference:

INTERNATIONAL SANITARY BUREAU,
Washington, D. C., March 7, 1914.

Hon. JOHN BARRETT,

Director General Pan American Union, Washington, D. C.

SIR: In accordance with a resolution adopted at the Fifth International Sanitary Conference held at Santiago, Chile, and with the approval of the International Sanitary Bureau, I am inclosing the call for the meeting of the Sixth International Sanitary Conference. A copy of the provisional program for this conference is also forwarded.

I request that, in conformity with the provisions of paragraph 7 of the resolutions relating to sanitary police, adopted at the Second International Conference of American States, you take the necessary steps to bring this call and the provisional program to the attention of the governments concerned.

Respectfully,

RUPERT BLUE,

Provisional Chairman International Sanitary Bureau.

SIXTH INTERNATIONAL SANITARY CONFERENCE OF THE AMERICAN REPUBLICS, TO BE HELD IN MONTEVIDEO, URUGUAY, DECEMBER 13-21, 1914.

INTERNATIONAL SANITARY BUREAU OF THE AMERICAN REPUBLICS,

Washington, D. C., March 7, 1914.

In compliance with the resolution adopted at the Fifth International Sanitary Conference, the Sixth International Sanitary Conference of the American Republics will be held in Montevideo, Uruguay, December 13-21, 1914, under the presidency of Dr. E. Fernández Espiro and the auspices of the Government of Uruguay.

A number of important sanitary subjects will be discussed at this conference, and it is expected that all the nations interested will be duly represented.

Provisional program for the Sixth International Sanitary Conference of the American Republics, to be held at Montevideo, Uruguay, December 13-21, 1914.

1. Review of sanitary legislation enacted in the different countries since the fifth conference.
2. Report of progress made in adopting the resolutions agreed to in preceding conferences.
3. Reports on morbidity and mortality statistics subsequent to the last conference.
4. Recent developments in the campaign against plague, yellow fever, leprosy, trachoma, malaria, hookworm disease, tuberculosis, and venereal diseases.
5. Measures adopted to combat the prevalence of cerebro-spinal meningitis, and acute anterior poliomyelitis.
6. Progress made in maritime sanitation since the last conference, especially with reference to the opening of the Panama Canal.
7. Data relating to the work of the sanitary information bureau of Montevideo.¹

NOTE.—With the approval of the program committee, additional papers may be presented by any delegation on sanitary or scientific subjects of general interest.

The reports by the various delegations shall be submitted in printed form to the secretary of the conference before the beginning of the sessions and will be accompanied by a short résumé.

ONE HUNDREDTH ANNIVERSARY OF PEACE :

ELABORATE and ambitious are the plans for celebrating the one hundredth anniversary of peace among English-speaking peoples, an era of good will dating from the signing of the Treaty of Ghent, December 24, 1814. While England is engaged in preparations for observing this event throughout her domains, there is a corresponding activity in the United States for a similar commemoration. Although merely preliminary reports are available for this celebration, yet a glance at their scope and nature reveals an undertaking of surprising magnitude.

The central organization of this movement in the United States is vested in the American committee, whose headquarters are at 50 Church Street, New York City. Closely cooperating with it in developing a systematic series of celebrations are a number of sub-committees, including a committee on international celebration, a committee on national celebration, committee on official celebrations by the States, and a committee on local celebration. The necessity for such a division of organization is at once apparent when it is remembered that the commemorative exercises and festivities are to

¹ This subject will be treated by the delegation of Uruguay.





John C. Stennis Space Center, Mississippi, USA
A man stands in front of a hedge holding a long, thin object.

and were a model for many people, yet their religious life was not always in accordance with the strict rules of the Reformation. Thus the Hanseatic cities were among the strongest in the country in the number of their church buildings and in their architectural style.

Thus, in the first place, the Gothic church architecture of the Hanseatic cities was a very strong influence on the church buildings of the Hanseatic League. Whether small or large, however, they all had the same general character, and it is hard to distinguish them from the churches of Hamburg or Berlin or other cities.



THE GOTHIC CHURCHES OF THE HANSEATIC CITIES
THE STEPPED GABLES OF ST. NIKOLAI, HAMBURG

Afterwards in the second century Hamburg was taken by the Danes. The Danish church architecture was the Gothic type of architecture, so that again influenced the city and that is why we see, for example, that the church of St. Nikolai which was built and completed in 1293 is very characteristic Gothic church building with its stepped gables and towers and its tall spire, and its interior.

The Gothic church buildings, are extremely fine, and especially the church of St. Nikolai, which is one of the most famous and most beautiful church buildings in Europe.

the features of the week's program. With the close of festivities at the Capital, the attention of the public will be directed to the next city in the chain. Thus, one after another, each city will appropriately celebrate the event in its own way, and this series will proceed northward until Ottawa, the capital of the Dominion of Canada, is reached. Here there will also be an extended period of observance.

The remaining cities in the United States will then again resume their participation in the American celebrations. One after another will play its part in the historic program and proceed westward until San Francisco is reached. The Panama-Pacific International Exposition will be in progress and with this fair as a setting, the first week in August will be devoted to ceremony and public exercises which will bring to a fitting and impressive close this international rejoicing over the 100 years of peace between the English-speaking peoples.

During the festivities numerous memorials of various kinds will be erected and courtesies exchanged between cities, States, and organizations. American and English cities or towns bearing the same names will exchange bronze tablets and panels. Monuments, milestones, and arches will be placed simultaneously at different points. But the most conspicuous exchange of courtesy will take place on February 12 and February 22, 1915. According to present plans, the American committee will present to the people of Great Britain, at London, a replica of St. Gaudens's statue of Abraham Lincoln at Chicago, and the British committee will return the courtesy by purchasing with English funds the ancestral estate of the Washingtons at Northamptonshire, England, and dedicating it as a permanent memorial.



PAN AMERICA IN THE MAGAZINES :: ::

The **Mystery of the Yucatan Ruins**, by Ellsworth Huntington, in the April number of Harper's Magazine, is an interesting study of the ancient civilization of this section of tropical America. The BULLETIN has heretofore published a series of profusely illustrated articles dealing with the remarkable ruins of such ancient cities as Quirigua, Chichen Itza, Uxmal, Copan, Mitla, Palenque, etc., so the subject is not new to its readers. Prof. Huntington, however, in the article under review gives but little space to the details of the remarkable masonry, sculpture, carvings, etc., to be found in any of these relics of ancient America. He deals rather with the broader aspect of the state of enlightenment, high culture, and wonderful energy of the race which had made such remarkable strides in human progress ages before the existence of a Western World had been dreamed of in the philosophy of the Eastern. A very old "New World" is this America of ours, and until more of our scientists and archæologists acquire the art of writing as entertainingly as does Prof. Huntington these interesting facts of pre-Columbian—we might also say prehistoric—America will remain hidden from the general reader in the dry tomes of science.

Among other ruins visited by the Professor in Yucatan was the one called Chaemultum, a splendid ruin hidden in the jungle. He writes:

I do not intend to describe this ruin, or the others still more wonderful that I saw during the next few days. One finds them everywhere in the jungle-covered portion of Yucatan, and a considerable number are located in the dense forest. Nowhere have I seen ruins which impressed me more strongly with a sense of the ability of the builders, not even in Greece. A colloquial remark inscribed in the visitors' book at Uxmal by a traveler from New York admirably sums up the impression they produce upon anyone of intelligence: "I think that after all we are not so smart."

The intricate patterns carved upon scores of temples and palaces vary most interestingly. At one extreme are massive geometrical designs made of rectangular stones jutting out from the face of lofty walls. Another type consists of numerous columns, some small and purely ornamental, and others large enough to form colonnades. A third type of adornment consists of huge stone serpents, strange forms of bird and beast, or distorted human heads set with great teeth. The culmination of the ancient Yucatecan art is reached in carefully modeled busts, like the two heads, lately exhumed, which stand side by side at Kabah. They are genuine portraits in spite of the crudity which impresses one at first sight. The plaited hair of these two men and the high tiaras are not particularly remarkable, although carefully executed, as can be seen in the photograph. The thing which rivets attention is the skillfully modeled features; the hooked noses, Jewish in outline, but with wider, more tropical nostrils; the curved lips, and the sparse, drooping mustaches. * * * From the statues I turned to our guide, a Maya Indian, and saw the same features repeated in

brown, living flesh. Our driver also had the same hooked nose, wide nostrils, and drooping mustache. The chief difference was in a lesser curvature of the mouth. So well did the old masters work a thousand, or, some say, ten thousand, years ago that although we know nothing of the origin or affinities of the race to which they belonged, we can at least affirm that in spite of mixture with foreign elements their blood still flows in Yucatan.

The originality, variety, and delicacy displayed in the carvings are not the only features which make us feel that "we are not so smart." The abundance, size, and solidity of the structures are no less remarkable. At Chichenitza, where within a radius of 25 miles on either side there are probably to-day not 5,000 people, there once was a vast city. Mr. E. H. Thompson, whose home has for years been directly among the ruins, says that the area of dense urban population was at least six miles square; that is, it comprised no less than 36 square miles, while beyond it lay extensive suburbs. Such a city, even if it had but two families to the acre, would have contained fully 230,000 people; whereas all Yucatan to-day has a population of only a little over 300,000. Chichenitza, however, by no means stands alone. Ninety-two ruins are known, according to Mr. Thompson, and many of them must have been towns of large size. Otherwise they could not possibly have possessed the wealth and surplus labor requisite for the construction of temples such as that of Labna, 375 feet long and three stories high. Yet Labna is only one of a score of notable ruins lying close together within 15 or 20 miles of Uxmal.

I dwell on these matters in order to emphasize the fact that the ancient Yucatecos were a civilized and prosperous race, blessed with a large amount of surplus wealth which they could use to support the architects, sculptors, painters, and engineers who superintended the building of the temples and evolved the myriads of ideas which were everywhere brought to fruition. There was also wealth to support the thousands upon thousands of workmen who quarried the rock, carried it to the buildings, hewed it to the exact dimensions demanded by the plans of the masters, or burned the lime with which an army of masons cemented the hewn stones. Elsewhere men were toiling to lay smooth, paved roads from town to town over the rocky, hillocky plain; while others must have been building and repairing the innumerable cisterns or reservoirs which alone enabled a large population to dwell in this riverless, springless land of underground drainage. Still larger bodies of men must have been busily tilling the soil. To-day the Indian farmer rarely raises more than enough for his immediate needs, and his wife can not comprehend the value of grinding to-morrow's corn to-day or yesterday. The present hand-to-mouth methods can scarcely have prevailed in the past, for then there must have been a large surplus supply of food, which by barter or taxation was available as a store to support the nonagricultural artisans and laborers.

At what time these conditions prevailed no man can tell. Various authorities have ascribed to the ruins an age of from 1,000 to 11,000 years. These figures are based on data derived from calendar stones preserved in many places both in Yucatan and in neighboring regions, such as Mexico and Guatemala. The stones can be deciphered with considerable accuracy, and exact dates can be assigned to the construction of many buildings. The only trouble is that the dates belong to the various local eras of the different countries, and no one knows when a single one of the eras began. This ignorance affords an ample field for speculation. There are, however, strong reasons for believing that the ruins date back a long time before the coming of the Spaniards. Two of the strongest of these reasons are that when the Spaniards came to Yucatan, early in the sixteenth century, the Mayas, in the first place, were a slow, mild, unprogressive people utterly different from the wide-awake, progressive race which alone could have built the ruins; and in the second place they made no claim to any knowledge or even any tradition as to the origin of the wonderful structures among which they dwelt. Probably the present Mayas are the descendants of the builders of the



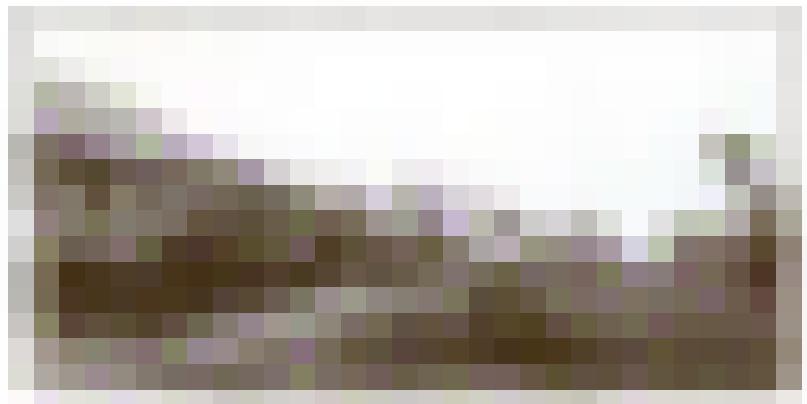
...and the other side of the same structure.
This is the side facing the river.

ruins, although perhaps largely mixed with other invading elements from the north-west—that is, from Mexico. * * * The modern Yucateco does not begin to have the energy and initiative of the modern Greek, but I believe it is no exaggeration to say that his predecessors were the equals of the Greeks or any other race so far as real achievement is concerned. I know that this is a sweeping statement, and I shall return to it later. Here it is enough to point out that the Greeks borrowed much of their culture from their neighbors; the Yucatecos, so far as we can learn, had no one from whom to borrow. The Greeks had at their command the accumulated store of knowledge and of tools from half a dozen great nations; the Yucatecos had only their own culture and their own crude tools to rely on. Each of these two nations was great because it was full of new ideas. We know the ideas of the Greeks not only from their ruins but from their books. Those of the Yucatecos are known only from their ruins, and yet those ruins show that in art, architecture, and the allied crafts brilliant ideas must have been numerous. * * *

Whatever may have been the date of the Yucatecan civilization, there can be no doubt of its greatness. The measurement of a nation's greatness is found by dividing its achievements by its opportunities. We Americans, according to our own opinion, have achieved great things, but in view of our opportunities it may be that we have been no more successful than the ancient Yucatecos. Let us attempt to sum up the achievements of that race. In the first place they developed a system of art and architecture which need not shrink from comparison with that of Egypt, Assyria, China, or any other nation prior to the rise of Greece. Secondly, they appear to have developed a system of roads which made communication much easier than it would be to-day except for the railroads. Then again they had a highly advanced system of water supply. In the days before the discovery of iron, deep wells could not be dug, and primitive people, as we have seen, could live nowhere except close to the deep caverns of the *cenotes*. Yet the main ruins have nothing to do with *cenotes*. They are often miles from them, and are located in places where the only modern water supply comes from wells 150 to 250 feet deep. Another evidence of high achievement is found in the size of the cities. People who could live in such vast numbers and could carry on such great public works must have had a highly organized and effective social and political system; otherwise chaos would have reigned. And finally these old Yucatecos were on the point of taking one of the most momentous steps in human progress. They had developed a genuine system of hieroglyphics and were beginning to evolve real writing—that is, the use of a definite character to represent a definite sound, instead of a character for each separate word—a step which the Chinese, able as they are, have never taken.

In a word, the ancient Yucatecos were brimful of new ideas; and in the last analysis ideas are the cause of human progress. It is possible, to be sure, that the seeds of some of these ideas, such as hieroglyphic writing, came originally from the Eastern Hemisphere. As to this we have no positive evidence, but one thing is sure: Even if certain ideas did come originally from other sources, they were completely assimilated and worked over into new forms in Yucatan. * * * At the most the people of Yucatan can not have borrowed from other nations a tithe as much as is borrowed by all modern nations, or even as was borrowed by the Greeks. If any race ever worked out its own salvation, it was the ancient Yucatecos.

A Hunter-Naturalist in the Brazilian Wilderness, by Theodore Roosevelt, in the April number of Scribner's Magazine, is the first of the series of articles which he is to contribute to that publication, descriptive of his journey into the wilderness regions of Paraguay, Argentina, and Brazil. In addition to his adventurous young son, Kermit, who has been employed in railway engineering in Brazil



for some time, Col. Roosevelt's companions are notable and peculiarly fitted for such an expedition which, at this writing, has not yet returned to the regions of modern civilization. They are Father Zahm, a highly educated Catholic priest and extensive traveler from Washington, D. C., who combines the culture of the trained theologian with the learning of a scientist and the daring of an explorer, and who has heretofore made extensive journeys into South American wilds; George K. Cherrie, a field naturalist of many years' experience in tropical America; Leo C. Miller, the enthusiastic young naturalist whose valuable work in South America for the American Museum of Natural History has formed the subject of previous reviews in the *MONTHLY BULLETIN*; Anthony Fielo, a former Arctic explorer and veteran of the Spanish-American war; Frank Harper, the Colonel's secretary; and Jacob Sigg, ex-United States Army hospital nurse, cook, and general utility man and natural adventurer. After reaching Brazilian territory the party was augmented by Col. Rondon, of the Brazilian Army, who has the reputation of being the foremost explorer of the Brazilian hinterland, and several scientists and assistants who contributed their aid and experience at the instance of the Government of Brazil.

As a hunter and naturalist, describing the peculiarities and beauties of the wild life he sees, Col. Roosevelt is fully as interesting as when he writes as the sociologist and student of men. His vivid portrayal of the various birds and animals, his genuine enjoyment of primitive life, his appreciation of all that is lovely and poetic in nature, as shown in this unusual narrative, reveal another side of his versatile character. Even while busied with other matters and before beginning the journey up the Paraguay River, the naturalist in him took note of many things pertaining to the fauna and flora of the countries visited, as the following paragraphs relative to the bird life of Brazil and Argentina bear witness:

During the two months before starting from Asuncion, in Paraguay, for our journey into the interior, I was kept so busy that I had scant time to think of natural history. But in a strange land a man who cares for wild birds and wild beasts always sees and hears something that is new to him and interests him. In the dense tropical woods near Rio de Janeiro I heard in late October—springtime, near the southern tropic—the songs of many birds that I could not identify. But the most beautiful music was from a shy woodland thrush, somber-colored, which lived near the ground in the thick timber, but sang high among the branches. At a great distance we could hear the ringing, musical, bell-like note, long-drawn and of piercing sweetness, which occurs at intervals in the song; at first I thought this was the song, but when it was possible to approach the singer I found that these far-sounding notes were scattered through a continuous song of great melody. I never listened to one that impressed me more. In different places in Argentina I heard and saw the Argentine mockingbird, which is not very unlike our own, and is also a delightful and remarkable singer. But I never heard the wonderful white-banded mockingbird, which is said by Hudson, who knew well the birds of both South America and Europe, to be the song king of them all.



Most of the birds I thus noticed while hurriedly passing through the country were, of course, the conspicuous ones. The spurred lapwings, big, tame, boldly marked plover, were everywhere; they were very noisy and active and both inquisitive and daring, and they have a very curious dance custom. No man need look for them. They will look for him, and when they find him they will fairly yell their discovery to the universe. In the marshes of the lower Parana I saw flocks of scarlet-headed blackbirds on the tops of the reeds; the females were as strikingly colored as the males, and their jet-black bodies and brilliant red heads make it impossible for them to escape observation among their natural surroundings. On the plains to the west I saw flocks of the beautiful rose-breasted starlings; unlike the red-headed blackbirds, which seemed fairly to court attention, these starlings sought to escape observation by crouching on the ground so that their red breasts were hidden. There were yellow-shouldered blackbirds in wet places, and cow-buntings abounded. But the most conspicuous birds I saw were members of the family of tyrant flycatchers, of which our own kingbird is the most familiar example. This family is very numerously represented in Argentina, both in species and individuals. Some of the species are so striking, both in color and in habits, and in one case also in shape, as to attract the attention of even the unobservant. The least conspicuous, and nevertheless very conspicuous, among those that I saw was the bientevido, which is brown above, yellow beneath, with a boldly marked black and white head and a yellow crest. It is very noisy, is common in the neighborhood of houses, and builds a big domed nest. It is really a big, heavy kingbird, fiercer and more powerful than any northern kingbird. I saw them assail not only the big but the small hawks with fearlessness, driving them in headlong flight. * * * The scarlet tyrant I saw in the orchards and gardens. The male is a fascinating little bird, coal-black above, while its crested head and the body beneath are brilliant scarlet. He utters his rapid, low-voiced musical trill in the air, rising with fluttering wings to a height of a hundred feet, hovering while he sings, and then falling back to earth. The color of the bird and the character of his performance attract the attention of every observer, bird, beast, or man, within reach of vision. The red-backed tyrant is utterly unlike any of his kind in the United States, and until I looked him up in Selater and Hudson's ornithology I never dreamed that he belonged to this family.

The gunboat yacht of the President of Paraguay was placed at the service of the party, which left Asuncion on December 9 for the trip up the Paraguay River. The descriptions of the country through which they passed, of the inhabitants who came to the landings when the vessel stopped at some of the towns along the route, and of various incidents of the journey are all interesting. Especially so is the following account of some fish caught by the party while stopping at Concepcion:

They belong to one of the most formidable genera of fish in the world, the piranha or cannibal fish, the fish that eats men when it can get the chance. Farther north there are species of small piranha that go in schools. At this point on the Paraguay the piranha do not seem to go in regular schools, but they swarm in all the waters and attain a length of 18 inches or over. They are the most ferocious fish in the world. Even the most formidable of fish, the sharks or the barracudas, usually attack things smaller than themselves. But the piranhas habitually attack things much larger than themselves. They will snap a finger off a hand inadvertently trailed in the water; they mutilate swimmers—in every river town in Paraguay there are men who have been thus mutilated; they will rend and devour alive any wounded man or beast; for blood in the water excites them to madness. They will tear wounded wild fowl to pieces, and bite off the tails of big fish as they grow exhausted when fighting after being hooked.



Miller, before I reached Asuncion, had been badly bitten by one. Those that we caught sometimes bit through the hooks, or the double strands of copper wire that served as leaders, and got away. Those that we hauled on deck lived for many minutes. Most predatory fish are long and slim, like the alligator and pickerel. But the piranha is a short, deep-bodied fish, with a blunt face and a heavily undershot or projecting lower jaw which gapes widely. The razor-edged teeth are wedge-shaped like a shark's and the jaw muscles possess great power. The rabid, furious snaps drive the teeth through flesh and bone. The head with its short muzzle, staring malignant eyes, and gaping, cruelly armed jaws, is the embodiment of evil ferocity; and the actions of the fish exactly match its looks. * * * They are the pests of the waters, and it is necessary to be exceedingly cautious about either swimming or wading where they are found. If cattle are driven into or of their own accord enter the water they are commonly not molested; but if by chance some unusually big or ferocious specimen of these fearsome fishes does bite an animal—taking off an ear, or perhaps a teat from the udder of a cow—the blood brings up every member of the ravenous throng which is anywhere near, and unless the attacked animal can immediately make its escape from the water it is devoured alive. Here on the Paraguay the natives hold them in much respect, whereas the caymans are not feared at all. The only redeeming feature about them is that they are themselves fairly good to eat, although with too many bones.

Of the town of Concepcion the author writes:

We were rowed ashore and strolled off through the streets of the quaint, picturesque old town; a town which, like Asuncion, was founded by the Conquistadores three-quarters of a century before our own English and Dutch forefathers landed in what is now the United States. The Jesuits then took practically complete possession of what is now Paraguay, controlling and Christianizing the Indians, and raising their flourishing missions to a pitch of prosperity they never elsewhere achieved. They were expelled by the civil authorities (backed by the other representatives of ecclesiastical authority) some 50 years before Spanish South America became independent. But they had already made the language of the Indians, Guarany, a culture tongue, reducing it to writing, and printing religious books in it. Guarany is one of the most widespread of the Indian tongues, being originally found in various closely allied forms not only in Paraguay but in Uruguay and over the major part of Brazil. It remains here and there as a *lingua general* at least, and doubtless in cases as an original tongue, among the wild tribes; in most of Brazil, as around Para and around Sao Paulo, it has left its traces in place-names, but has been completely superseded as a language by Portuguese; but in Paraguay it still exists side by side with Spanish as the common language of the lower people and as a familiar tongue among the upper classes. * * * The English missionaries and the Bible Society have recently published parts of the Scriptures in Guarany; and in Asuncion a daily paper is published with the text in parallel columns, Spanish and Guarany—just as in Oklahoma there is a similar paper published in English and in the tongue which the extraordinary Cherokee chief Sequoia, a veritable Cadmus, made a literary language.

We walked up the streets of Concepcion, and interestedly looked at everything of interest; at the one-story houses, their windows covered with gratings of fretted iron-work, and their occasional open doors giving us glimpses into cool inner courtyards, with trees and flowers; at the two-wheel carts, drawn by mules or oxen; at an occasional rider, with spurs on his bare feet, and his big toes thrust into the small stirrup rings; at the little stores, and the warehouses for matte and hides. Then we came to a pleasant little inn, kept by a Frenchman and his wife, of old Spanish style, with its patio or inner court, but as neat as an inn in Norway or Brittany. We were sitting at coffee, around a little table, when in came the colonel of the garrison—for Concepcion is the second city of Paraguay. He told me that they had prepared a reception for me.

Notwithstanding the fact that the colonel was dressed in his rough hunting costume and was unprepared for such social attentions, his kind hosts took him in charge and showed him every courtesy and attention, and he seems to have enjoyed his stay there very much. From there the journey was resumed up the Paraguay, and on the Brazilian border the colonel's party was met by Col. Rondon and the Brazilian contingent in a shallow river steamer and the expedition pursued its way up the river into Brazil, reaching Corumba on December 15. At this point the reader is left to await the continuation of the story in the next issue of Scribner's.

Parques de recreo (public playgrounds) is an article in the March issue of the Spanish edition of the **MONTHLY BULLETIN** of the Pan American Union, the material for which was furnished by Henry S. Curtis, Ph. D., formerly secretary of the Playground Association of America. Dr. Curtis is perhaps the leading authority on the subject in this country and has spent much of his time in writing and lecturing in advocacy of this civic aid to the mental, moral, and physical development of the young.

The article outlines the methods usually adopted in the cities of the United States where the movement has been introduced. In this connection it states:

In this new line of work specialists have been evolved, usually from the teaching force of schools and colleges, and at present the municipal governments of about 125 cities have on their pay rolls, or indirectly in their employ, one or more of these playground and recreation specialists, who superintend the physical welfare of public-school children. A national organization, known as the Playground Association of America, started in 1906, gave an impetus to the work that had previously been taken up in a desultory way.

In the organization of a playground association a large number of people are not necessary; in fact, if a score of citizens of a town or city will work together they may accomplish more than thousands, and sometimes it is better to organize with a small number of earnest workers. In the United States it is customary to launch the playground movement by means of a public meeting, to which have been invited the leading citizens. In order to secure a better attendance, it is advisable to have some noted speaker, whose services may often be secured gratis, to address this first assembly. In addition to this feature a number of stereoptican views and moving pictures may be shown, illustrating public playgrounds and recreation work in other localities. Frequently it is possible to secure from the National Association a field secretary who is thoroughly familiar with the work and who will contribute to the first meeting many practical ideas of benefit to the local organization.

Usually the officers of the association are elected at the first meeting and consist of a president, vice president, secretary, and treasurer. These are generally prominent and public-spirited citizens, who are willing to contribute their time for the good of the cause. Sometimes an active young man already interested in the social welfare of his community is selected for the important position of secretary, and it is obvious that if paid a salary he will work harder and more effectively than if the services are rendered gratuitously.





The constitution and by-laws having been drawn up and adopted, a matter of easy accomplishment—for the National Association will furnish proper forms, which can easily be changed to suit local conditions—the new association is ready for a general survey of the field of its labors. This first survey should be thorough, for it touches upon many interests vital to the community. Among many other things which must be taken into consideration are the number of children of the city or town, the size of the school grounds, locality best suited for the greatest number to be accommodated, the records of the juvenile courts of the city, and many other matters pertaining to the subject of the children's welfare. Such surveys have been systematized by the Playground Association of America, whose cooperation can invariably be had.

The National Association has made a general survey of the progress of the movement up to 1914, and a most gratifying showing is the result. It was found that 642 cities are engaged in the work, with playgrounds in various stages of activity. Of these cities 342 have regularly paid playground leaders; 22 cities have voluntary leaders without pay; and 59 have no special directors except the regular school-teachers, who assist when not otherwise engaged. There were 31 cities which were taking the necessary steps to establish playground centers. From the reports of 313 cities an average daily attendance for the months of July and August, 1913, totaled 454,348 children. The activities of the various centers embrace athletic exercises, games, arts and crafts, skating, gardening, dancing, swimming, story telling, pageants, and in fact "everything that will bring joy and happy self-expression."

Tropical Nature in Colombia, by Prof. A. S. Pearse, of the University of Wisconsin, in The Popular Science Monthly for March, is a splendid description of animal and vegetable life and its environment in forest and stream, swamp and desert, in that section of the world where luxuriant nature riots in all its extravagance. Some idea of the graphic manner in which Prof. Pearse depicts this paradise for the naturalist, botanist, and biologist may be had from the following excerpts, although the entire article must be read in order to appreciate its entertaining style and the amount of information it contains:

The present article attempts to describe tropical nature as it exists in northeastern Colombia along the northern end of South America, just south of the Caribbean Sea. The descriptions are based on observations made while the writer was a member of an expedition sent by the Museum of Zoology, University of Michigan, to explore the region about the old Spanish city of Santa Marta. This portion of South America offers unusual opportunities for zoological study on account of its diversity. A strip of sandy desert overgrown with giant cactus stretches along the coast and extends back into the interior 7 or 8 miles. Beyond this the foothills of the Sierra Nevadas rise; only 20 miles from the city the peaks attain a height of 8,300 feet above sea level. Many small streams take origin in the mountains and unite to make their way across

the lowlands to the coast. Extensive mangrove swamps line the shores of the Cienaga Grande, a great lagoon into which several rivers empty. * * *

Starting the day after our arrival, we rode 18 miles into the interior on mule back to the Cincinnati coffee plantation, the home of Mr. Flye. That ride was wonderful! As we went higher the luxuriance of the vegetation increased, and the trail often hugged the brink of a precipice where one could look for miles over the virgin forest and the banana plantations below. Like the hunter in the "Lady of the Lake," we

often paused, so strange the road,
So wondrous were the scenes it showed.

We lived at the plantation for a month in a clean little adobe house at an altitude of 4,500 feet. In half a day we could walk down to Minca, at about 2,000 feet, or up to the top of San Lorenzo, 8,300 feet. Beyond the coffee the tropical forest stretched away unbroken; in one direction to the desert along the coast, in the other toward the snow peaks at the crest of the Sierras. Every afternoon it was cloudy; usually there was rain.

Two things are noteworthy in comparing tropical forests with those of colder regions—the diversity of vegetation and the intensity of the struggle for existence. In the temperate or frigid regions of the earth which are forested we are accustomed to see one species or genus of trees dominate all other plants and become a "climax forest," e. g., oak, pine, spruce, or beech forests. But in the Tropics conditions are favorable for many species; the growing season is always good and the forest is always varied. Tree ferns, palms, vines, deciduous trees, epiphytes, mosses, ferns—all grow in riotous profusion. Vines climb over great trees and steal their sunlight; strangler trees grapple with forest giants, squeeze them out of existence, and take their places; epiphytes and mosses festoon the limbs of trees, stretching their leaves toward the light that filters through the canopy above. Any handicap means that a tree must give way to more successful rivals, and many drop out. But the floor of the forest is not always strewn with the remains of the unsuccessful, for where it is not too wet the termites, or white ants, honeycomb every bit of dead timber and convert it into powder, which in turn is "resolved to earth again." Thus the cycle goes round and tree succeeds tree. One who lives in a temperate climate has no idea of the manifold intensity of the struggle among plants in tropical forests. * * *

The humid shade of the forest offers shelter to many animals which, like the plants, show a great variety of adaptations. A large number of animals depend directly on the plants for food. The lowly termites are quick to appropriate any dead or diseased parts; vegetarian ants swarm everywhere. Long-tailed kinkajous come forth at night to climb about in the mango trees. Wood rats, squirrels, and agoutis feed upon the luscious aguacates (alligator pears). Many birds have become specialized for fruit eating. Flocks of gaudy parrots squawk among the trees, resplendent toucans wipe their great beaks against the limbs which have borne their repasts. In addition to these specialists many other birds eat fruit when it is available; trogons flit shyly here and there, and conceited motmots perch so that they may proudly wag their beautiful tails from side to side. Yet the denizens of the tropical forest do not appear gaudy and highly colored. A parrot is indeed a splendid object when you hold him in your hand, but stand below a mango tree and you are amazed to find that it is practically impossible to see any of the flock which are squawking noisily through its foliage. Only by watching carefully for movement can you pick out a bird here and there.

Besides the animals which hunt in the trees many wander about over the ground beneath. These are usually not brightly colored. Tapirs were common about the plantation, and one was killed by the workmen during our stay. These pachyderms had regular trails like cow paths through the forest. Doves of peccaries rooted in the ground and we often saw places where they had been feeding, but that was all. Mr. Flye told us how he had once been treed by a drove of these ferocious "wild

hogs" which stood about and gnashed their teeth for a couple of hours. Jaguars and tiger cats hunted in the forest. One day a small boy brought us an armadillo. Agoutis were common everywhere. Once, while I rested at the fork of a river, a great agouti came to drink 50 feet below. My Colt was at my hip, but I did not have the heart to shoot him—so much at ease was he, so self-contained, and so in keeping with his forest. He took his drink and went away, never knowing that a strange gringo had watched. Another time we saw a troop of big red monkeys swinging along through the tops of the trees, but they quickly scampered away when they spied us. We always went armed with gun or pistol, hoping that we might bag one of the larger mammals, but fate was against us. The large animals are extremely shy and their coloration makes them difficult to see. To secure them one must attend to little else. Our interests were not in big game, but we were well repaid with smaller fry—the forest filled our eyes, and notebooks, and photographic films to overflowing—yet never to satiety. There was always something new and interesting.

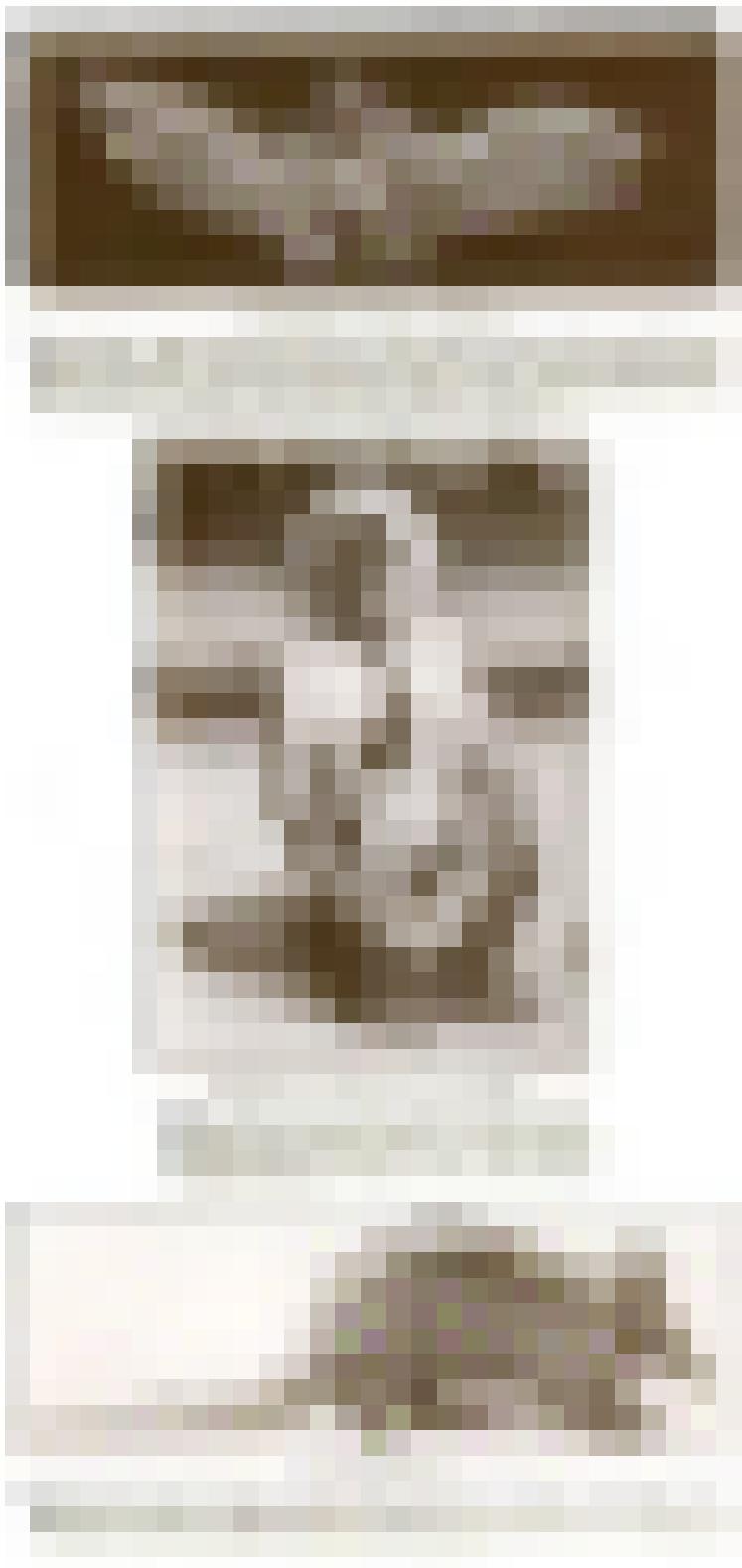
The forest swarmed with lizards, such as the little anoles and geckos, which crouched motionless or scampered swiftly after fleeing insects. Snakes lurked among the fallen leaves or climbed among the trees—gaudy coral snakes with their cross bands of red and yellow, the vicious fer-de-lance or bushmaster (called "Ecke" by the Colombians), big but harmless gopher snakes. Sometimes we met a "Bejucá" (vine snake)—the most curious of them all—never half an inch in diameter and attaining a length of 3 or 4 feet. But snakes were not easy to find. We rarely got more than two or three in a day, sometimes one, often none. Scorpions, tarantulas, and other spiders abounded throughout the forest. Big land snails crawled on the trees or over the ground. Bright-colored butterflies fluttered in flocks through the open spaces. Probably the most typical forest vertebrates were the little tree frogs, which were abundant and various, and whose shrill piping was often the only sound to break the deep silence.

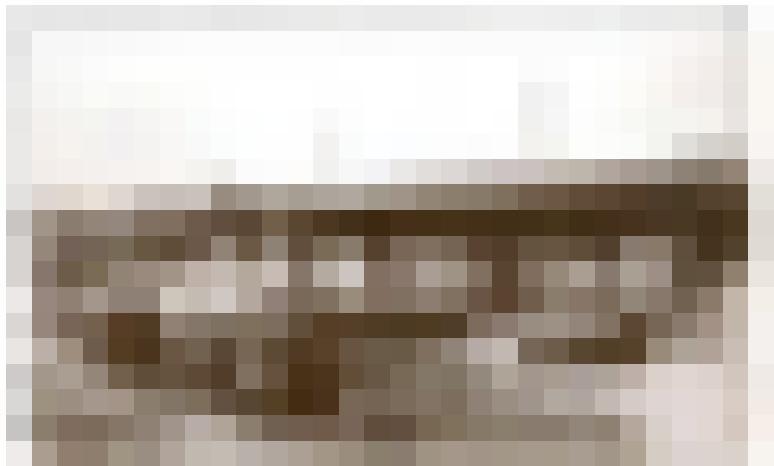
The professor gives an interesting and detailed account of the termites and various species of forest ants whose habits, manners, and customs, so to speak, he gave the closest observation. Many varieties of tropical plants are described, and he found that many of the plants which are raised in hothouses or summer gardens in the United States are common weeds in Colombia. In the forest caladiums and cannas grow everywhere; umbrella plants line the shores of all streams, while in the swamps cannas and umbrella plants constitute an important part of the flora. In some swamps there was a slender stemmed plant which had little white air bladders to keep it at the surface. Of one of the denizens of these swamps he writes:

The jacana, a rail-like bird, is admirably adapted to live in tropical swamps. The greatly elongated toes enable this bird to walk with ease over the floating vegetation.

Both sexes have a spur on the front of each wing which they use in fighting. A flock of jacanas is a beautiful sight as it alights, for every bird stretches its yellow-tipped wings as far upward as possible before closing them. Another swamp bird was a species of tree creeper which built a long bottle-shaped nest, which was constructed of thorny twigs in low shrubs. The eggs were placed in a little enlargement at the closed end and the long thorny entrance prevented snakes and other predaceous animals from entering.

Something like 20 original photographs serve to illustrate the story and give added interest to this narrative of a naturalist, which should be read by all who take an interest in the wonderful works of nature seen in unusual places.





A Visit to the Nitrate Zone of Chile, by W. Scott Lorrie, is an entertaining as well as informative article dealing with Chile's leading industry, which appears in the first number of *Chile To-day*, a bright up-to-date little magazine, of which Mr. Lorrie is the editor and which is being published in Valparaiso.

After giving the reader a graphic picture of Antofagasta and indulging in a little good-natured criticism of travel writers "who see in a month everything that is worth seeing in a continent, and then publish books in a way that makes you feel that they must be authorities on the matter," Mr. Lorrie continues:

After spending a few days in Antofagasta one's thoughts are turned to the fabulous wealth of the nitrate fields in the interior. You are anxious to see one of those places they call *oficinas*, where nitrate is produced on a large scale. You go to the station in company with a friend, who is connected with one of the *oficinas*, and almost before you know where you are you find yourself on one of those trains which percolate through the rural tranquillities of the nitrate districts, surrounded by a somewhat hilly region as barren as any place on earth. You soon begin to think that the region is one of the paradoxes of nature's laboratory, because no living thing can find nourishment here, although from these very nitrates nourishment is given to impoverished soils the world over. * * *

In order to properly describe the nitrate industry of Chile, it is necessary first to enter into details regarding an *oficina*. Take the *oficina* known as "Ossa" as representative of the one hundred odd extant in Chile. Picture in your mind a small village abandoned to the solitude of a great desert, then you have an idea as to the place about to be described. There are several comfortable-looking dwellings, two stores, a market place, hotel, school, hospital, workmen's houses, warehouses, machine shops, and the engine house. The majority of the buildings are painted green. Conspicuous among them is the large two-story engine house, whose appearance is rendered important by two vast smokestacks running 60 or more feet skyward. Wherever you look from you discern huge whirls of smoke that darken the sky. They impress you as so many streams of gold that work delivers to the activity and commerce of the universe.

The population of the nitrate seats varies according to their importance. The one here dealt with has some 2,000 inhabitants. At one extremity of the little town is found the gigantic building in which are installed the crushing and other machinery necessary in the elaboration of the *caliche*, which is the name given to the crude substance that contains the nitrate. Here you are familiarized with the different processes the stuff has to go through before it is extracted in its crude state.

The basis of the first step of mining operation is found below the *caliche*. It is the lowest stratum of bedrock. The method of extracting *caliche* is extremely simple when compared with the elaborate machinery necessary to obtain other minerals. But it is as well that this should be the case, otherwise the profit might be so small as to scarcely justify the elaboration, except on a very large scale, if the market value of the present time is to be considered the full worth of the product. Market conditions, however, fluctuate according to circumstances. A small shaft is sunk through the surface deposits and through the *caliche* to the bed of clay or gravel. Here a hole is dug out, in which is placed a charge of dynamite. An explosion is the result. From the resultant débris is collected the *caliche*, which is taken to the factory in wheelbarrows or mule carts as distance demands. The *caliche* itself is a combination of nitrate of soda, sulphate of soda, sodium chloride, iodine salts, small proportions of potash, magnesium, and lime, with insoluble matter. With the exception of the iodine, and in some cases the common salt, these being saved as by-products for other

purposes, the entire industry of the *oficina* is devoted to the preparation of the nitrate in such a form that it may be economically exported.

In most cases the crowbar is employed in the extraction of *caliche*. When the crushers have reduced it to small pieces, not more than 2 inches thick, it is run into large boiling tanks, where the salts are dissolved, the sand and other refuse sinking to the bottom. Heat is produced by means of cylinders, which raise the temperature to 120°. As the nitrate has a different point of solubility from other salts, it can, therefore, be precipitated by itself as the water cools. When it has crystallized in large cooling pans, after having gone through a number of minor processes, the dry nitrate is put into bags and dispatched to the coast for shipment. The rich substance thus obtained is not, however, handed down to commerce in an absolutely pure condition, its purity being 95 per cent, further purification being considered unnecessary.

Nitrate costs 5 to 6 pesos to produce, and it is sold to the export trade at 8 pesos f. o. b. Exceptions, however, must be noted to these prices, as the profits vary according to the quality of the nitrate and the economic methods by which it is extracted. The Antofagasta Nitrate Co., to which belong the *oficinae* dealt with here, produces, with the three seats of its property, more or less, 300,000 quintals of nitrate a month. The estimated value of the company's property is £4,000,000.

Los Peces que Cambian de Color (Fish that Change their Color) is the title of an article in the March number of the Spanish edition of the MONTHLY BULLETIN of the Pan American Union, based largely on the account of these peculiar fish which appeared in a recent number of Country Life in America. After describing the New York aquarium, its location, and variety of exhibits, the article continues:

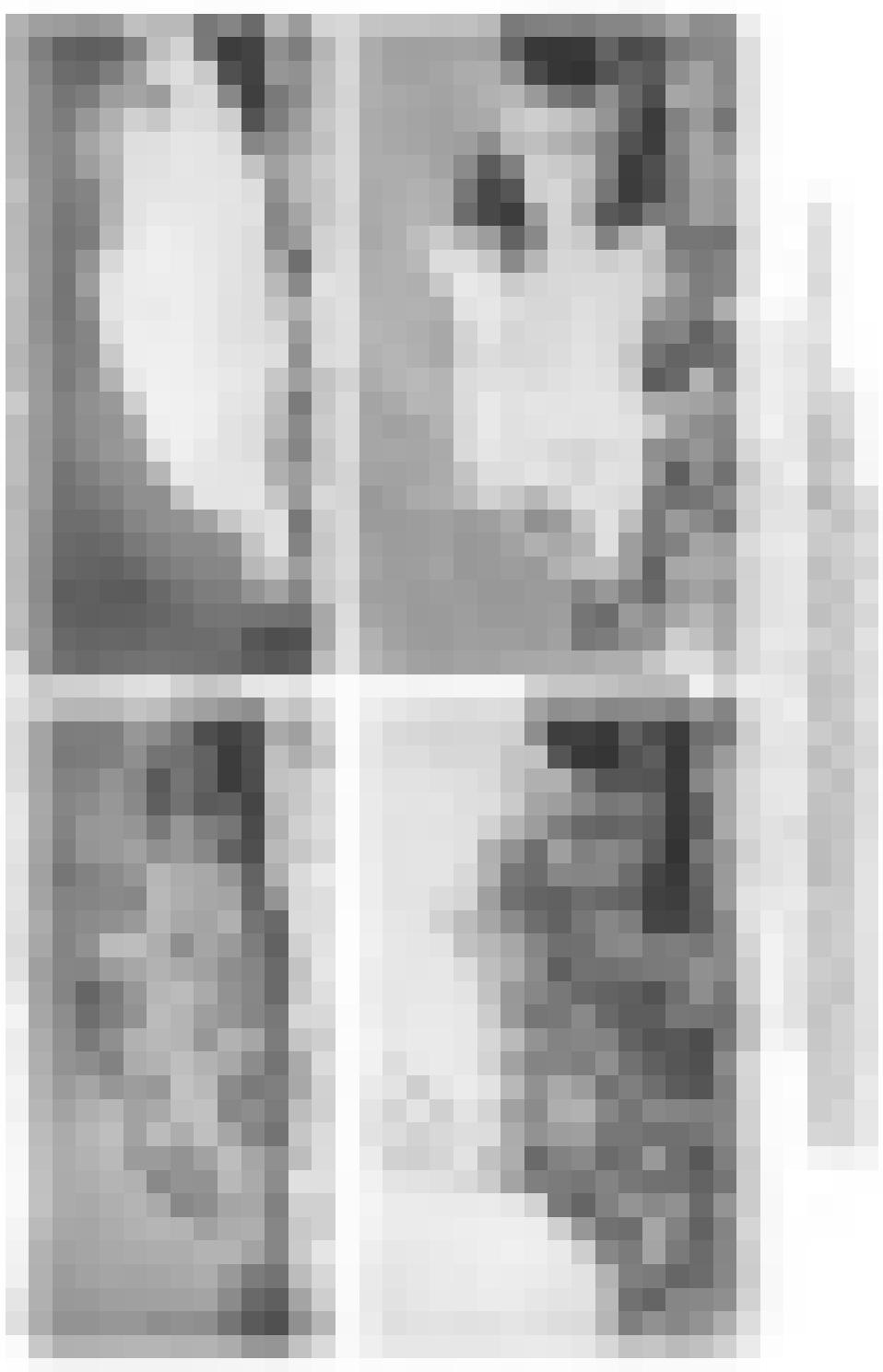
It is really a marvelous place, and to many visitors no more interesting species of fish exist than the "chameleons of the sea," as they are called. They are certainly most attractive and their cases are always sought by the children, who seem to take delight in watching their antics.

Scientists who have been making a close study of the phenomena presented by these fish believe that the color is under control; they find that the skin of the fish is composed of granules of various colors, and according to Prof. Summers, these colors result from the functioning of the nervous organism. In recent experiments the water which runs through all the cases was stopped, and it was found that the color of the fish was affected. The fish noticed the changed conditions and their bodies were in what the scientists term the "distressed" phase. On other occasions the color of the fish is visibly affected when food is given them after an interval of starvation; in still other cases when the lights are turned off or on the colors of the fish appear to change rapidly. * * *

In the Nassau group (*Epinephetus striatus*) the greatest number of changes has been observed, seven distinct variations having been noted, viz, a creamy white; dark, with pure white underparts; a copper brown; black bands around upper body, lower section white; pure white below with dark band from fin to tail; dark, mottled with white; and dark, suffused with red.

The *yellow fin* (*Mycteroperca venenosa*) is another species that shows a number of beautiful changes. If we watch this fish for half an hour it is really amazing to note the changes from gray to scarlet and various other colors in general as well as in spots of different hues. Some of these specimens taken from deep water are of an intense scarlet color.





The *hog fish* (*Orthopristis chrysopterus*) has been observed to make two changes in a very short time, that of dark to creamy white, and medium dark colorations. The *red hind* (*Epinephetus guttatus*) is also known to make two changes, the intense red spots changing to creamy white and also to a pale red. This fish has the peculiarity of lying much of the time on the bottom of the tank or of perching itself vertically on the walls.

These are only a few of the varieties of fish that are constantly changing their colors. Some of these changes are very rapid, while other are so slow than one may stand near the tank and watch each phase of the change as the fish swims about in a leisurely manner. Their changes and peculiar antics never fail to attract the attention of the visitors, and as the tanks containing these species are located in the same section of the aquarium, this department furnishes perhaps the most attractive exhibit for the general public.

Montevideo, by Theodore Roosevelt, is another installment of the series on South America now running in the Outlook, and appears in the February 28 issue. In this contribution Col. Roosevelt briefly describes the section of Uruguay traversed on his journey from Brazil, gives due praise to its modern capital, and dwells at some length on the Uruguayan view of the Monroe doctrine as interpreted by the ex-President of the United States. The following excerpts give some of his observations relative to the country and the city of Montevideo:

On the afternoon of November 3 we crossed the boundary line from Brazil into Uruguay and were at once received by representatives of the Uruguayan Government. There was little change in the character of the territory. The Uruguayan "camp"—as the open land is called—is a rich, fertile country of rolling prairie, well watered, with here and there ranges of hills. From the windows of the railway train we saw herds of cattle and horses, many of the cattle evidently Herefords or Durhams. The picturesque mounted herdsmen, the gauchos, were also in evidence; splendid horsemen, at utter ease no matter what their horses might do. Most of them wore curious baggy trousers, loose shirts, *scraps*, and broad hats, but now and then we came across individuals with ordinary trousers thrust into top-boots, such as one would see in our own western country.

There is very little wild land left in Uruguay, but much the largest proportion of all the land is still pastoral. There has been, however, a great growth not only of the cities but of agriculture, and the gaucho is no longer the all-important character he once was. This undoubtedly tends for stability in government, because the many excellent traits of the gaucho did not include understanding the need of orderly democratic self-government as our people understand it. I am very thankful, however, that the gaucho still remains, and I hope that he will always remain a prominent feature of the life in Uruguay. He is a strikingly picturesque and distinctively national feature. * * *

Next morning we were in Montevideo, the capital of Uruguay, a beautiful city of some three or four hundred thousand inhabitants. Like Australia and the United States, and of course like Europe, South America shows the modern tendency—by no means a healthy tendency—to see great cities grow relatively faster than the country districts. This is as true of Montevideo and Buenos Aires as of Seattle and Portland, Sydney and Melbourne.



Montevideo has a character of its own, and great charm, for, though it has grown with much rapidity, it has not shown the almost abnormal growth of cities like Buenos Aires and Chicago. In consequence, although a great commercial city, a railway and steamship center, with a huge export trade of wool and frozen beef, it yet keeps an attractive Old World flavor, a sense of continuity with its own past. There are beautiful parks, wide, attractive streets, and stately private houses, with lovely gardens. There is a public rose garden, where, as the director, who fairly lives in his flowers, told us, there are 12,000 roses of 800 different kinds.

In the immediate neighborhood of Montevideo the country is flat, excepting for one prominent conical hill crowned by an ancient Spanish fort, now turned into a lighthouse. This is as delightful as a castle-crowned hill by the Rhine, and we rode out to it, and from it obtained an extensive and very beautiful view, not only of the city itself, but of the rich green flat country round about. * * *

The President of Uruguay is a man of exceptional power and ability, and very interesting to meet. I was also much interested by the judges and legislative and executive officials whom I saw. In Uruguay, as in the other South American countries I visited, there was very evident a resolute purpose not only to achieve industrial success as the northern nations of Europe and America have achieved it, but also to achieve both energy and practical ability in the actual handling of public affairs. There is a complete realization now, and for many years past there has been a growing realization, that government must be tested by the practical efficiency with which it works, and that it is imperatively necessary to substitute other methods than those of forcible revolution for the settlement of political differences.

The Canal Zone To-Day, by Lillian E. Elliott, in The Pan American Magazine, is a welcome variation of the usual canal story. The article deals with the picturesque features of the Canal Zone and the time-worn statistical figures and stereotyped "giant task," "stupendous undertaking," "herculean efforts," and "engineering feat" phrases are conspicuous by their absence. The author states that this is the fourth time that she has spent a month or more on the Isthmus, that the magazine has published five special numbers on Panama, and that moreover "the Isthmian Canal Commission publishes (in addition to a plethora of books on the canal) a handy pamphlet which gives cubic yards, mileage, expenses of everything, details of scientific interest, deals thoroughly with all construction, and explains all the machinery and operations of the locks." Hence:

All these things considered, I promised myself that this time I would not trouble about the depth of water, cubic contents of anything, or the height of any other thing. If any statistics creep in, it is by the merest accident. Nothing is intended in this article but description of impressions that one gathers of the canal to-day, from a spectacular point of view.

For all of which let us be devoutly grateful. And to show our readers how entertaining and readable a story of the canal minus the statistical features can be written by a level-headed woman, we propose to quote rather extensively, as follows:

It is a beautiful thing, this Panama Canal. I do not think that any words can convey the sense of power aroused by the great pieces of construction work along the route—these solid and dignified masses of cement and steel look as firm as the Pyramids, as serene as the everlasting hills themselves, in spite of their display of sophistication and ingenuity.

But once out of sight of the huge lock walls and gates, out in the canal lakes and in the cut, the loveliness of the scene seizes you. This, you say to yourself, is no mere utilitarian canal, but a splendid contribution to the beauties of the world. Think of other canals for a moment—the Suez, with its dead level of burning yellow sands on either hand; the Keil Canal, in a dour northern setting; and the Manchester Ship Canal, gray and brown in a gray and brown region. No one has ever called them beautiful, anything but just canals; fine things, commercial necessities, marvelous and admirable, but just canals.

The Panama Canal is something more. It is exquisitely staged. It has been built in a tropical locality where nature swathes everything in a luxuriant green mantle, where the hills seem to put themselves into the picture with a deliberate intention of being specifically decorative, where the skies are flooded with sheets of pure color, reflected in these clear rippling waters. A veil of romance is part of the glory of the Isthmus. Its history is full of events that catch the fancy, and when you cross it you can not but remember Balboa and the early Spanish settlers, the riches of Peru that flowed over the first trails, the lusty pirates who now and again made raids on these treasures, the old canal schemes, the heroic failure of the French, and looking at the accomplished work, you pay tribute to the fight whose signs and tokens are still to be seen, and that has been won to-day.

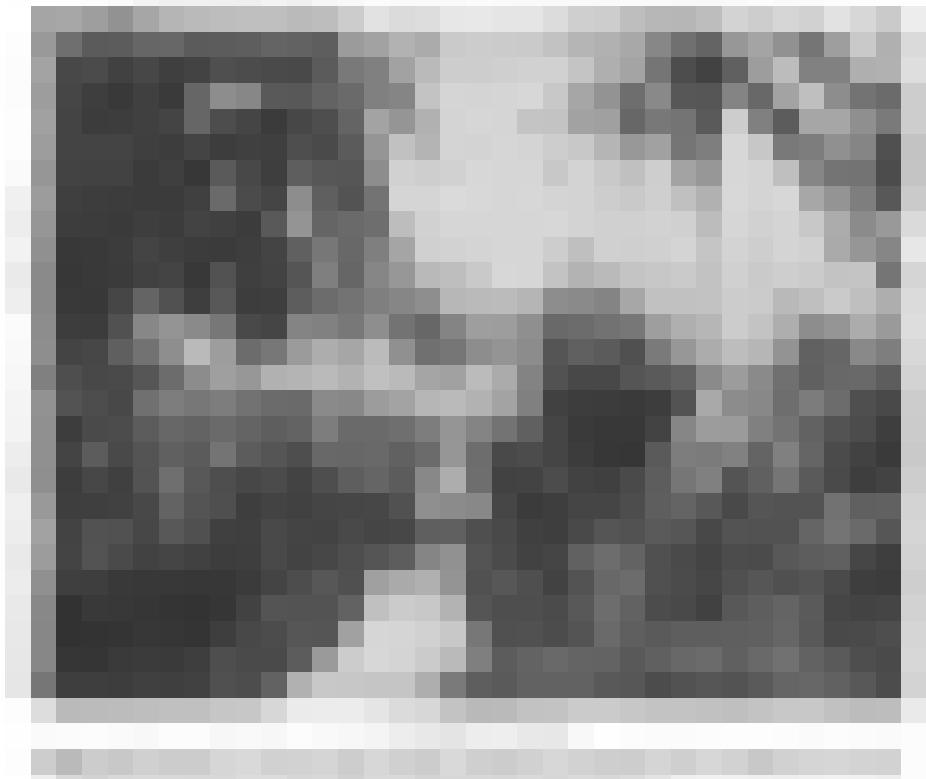
The canal is part of a four-centuries-old drama, and everything that could be contributed by nature to set the play she has given with prodigality. Up to the present the dust and turmoil of the work has obscured the fact that this is a waterway—four years ago there was nothing to suggest a canal to the uninitiated; it was just a vast workshop toiling in a sun-soaked valley. But when the ships begin to use this water bridge and the loveliness of sky and emerald-hill country and lily-decked lakes are seen from the decks, people will discover that this is a sight worth seeing for its own intrinsic beauty. * * *

Admitting that the canal is beautiful, a most "scenic" sight, as the moving-picture advertisements say, one is perhaps permitted a pang of regret for the dead and dying towns of the Zone. They were not really towns—Giorgona, Pedro Miguel, Miraflores, Culebra, and all the rest—but they were quaint, pretty, Japanese-like, dolls' house imitation of towns; work camps, really, but done on such a regal scale that a new standard has been set forever and ever of what the worker shall have in the Tropics, in the way of housing and food and general well-being.

No more shall the pioneer bridge builder, the surveyor, the railroad constructor, the mining engineer, go out into the bush and live in a thatched shack on native food, anywhere in new countries. Henceforth, because the American has had them in Panama, the man in the Tropics will demand and get a screened house, good furniture, good food, and sanitary conditions. It is said that both white and colored employees have been "spoiled" in Panama, and while this is true, it is the kind of spoiling that saves lives and made it possible to build the canal. Without these special attentions and luxuries the American would never have stayed on the Zone at all. * * *

It is difficult to realize that the engaging scenes of busy life have almost disappeared on this territory, that in a few months the houses will all be torn down, abandoned or burned, that the Zone will revert to its primeval quietude.

When I first saw the Isthmus, in the early part of 1910, this girdle of the green tropics was like no other place in the world. Colon and Panama, each with her feet in her respective waters, were the two ends of a string of villages that lay like shining beads on an emerald ribbon. Artificial villages these, made up of black and white screened houses on stilts, decorated with pink and blue vines, the feathery fronds of palms, and the gay leaves of red and yellow crotoms. And what astonishing neatness! You could not find its equal in the tidiest Dutch hamlet. Everything had an air of being just fresh washed, even to the shrubs. Not a scrap of loose paper, not a speck out of place, marred these odd little towns, glorified little towns born for an hour like mayflies.



At night they shone from afar in a sparkle of electric lights against the dark blue isthmian hills; at dawn and dusk they hummed with the voices and echoed with the footfalls of men going to or returning from work on the cut or the dam or some of the locks. To-day they hum and stir less; some of them, like Gorgona, are gone forever, and the ones that remain have a somewhat shabby air, a draggled, exhausted look, as if they knew that the excitement was all over, and nothing remained but a "demolition grind" to get cleared up.

In this pleasing style the author takes the reader on a sightseeing tour on the new railroad, starting at the city of Panama and closing with Colon, giving delightful graphic pictures of the towns and natural scenery along the route, and when you have finished the article you really know something of what the great canal looks like now.

Riding Over the High Andes, by Lewis R. Freeman, in the Overland Monthly (San Francisco), is an account of a trip over the Andes in the fall season when much of the route was covered with snow. The journey was made by the old coach road part of the way, first by muleback, then by coach, and finally by railway train. The trip was through the Uspalata Pass, passing the famed Christ of the Andes statue, which stands on the boundary line between Argentina and Chile. The narrative is most entertaining, and while the author refrains from attempting to describe the scenic grandeur, he gives very lively and realistic descriptions of other features of the journey, as, for instance, the following relative to the ride down the mountains by coach:

The coach road is the most exciting part of the trans-Andine journey, and the drivers are quite the peer of the best I have ever seen. To ride in a coach the whole distance from Cuevas to Juncal would probably prove very tiresome, but to reel off the last 15 miles of down grade in less than an hour in this manner is a most exhilarating experience. * * *

A mountain driver in any part of the world must, above all else, be cool-headed, nervy and resourceful, and at the same time be very deft in the manipulation of his reins. Associated with these essential characteristics will almost always be found a certain amount of dare-devility and recklessness, never absent in one who follows a calling in which there is constant physical risk. In these particulars the wild Chilenos are hard to beat. For delicate manipulation, finesse in maneuvering, and aristocratic coachmanship possibly our attenuated four and six-in-hands offer the greater opportunity; but for a slap-bang, helter-skelter, hell-to-split, live-till-you-die, cover-ground-and-sling-gravel kind of an outfit, give me one of these Chilean chariots every time.

The two middle horses of a four (in Chile the horses are hitched four abreast) were hitched together in regular fashion. They wear a collar harness, and have a rein to each of their bits. The outer horses only wear breast straps and bridles. A rein from the driver leads to the outside rings of their bits, the inside ones being connected by a short strap with the bridle of the next horse. Thus the driver holds four reins, as with our four-in-hands.

The coaches are usually battened up tight to keep out the wind and gravel; and there are but two places from which you can observe operations; one of these is with the driver and the other is on the step in the rear. If you are only one coach the driver's seat is preferable, but if there are other vehicles following close behind the opportunity of seeing the gyrations of your own outfit repeated in turn by those next in line is too good to be missed, and the back step should have the call.

The road for the most of the way is the usual succession of zigzags, banked high at the turns like a bicycle track to help the coach keep its balance, and with a further precaution in the shape of a 2-foot thick and 3-foot high stone wall around the outer edge. The banking checks most of the slide, and the stone wall is always waiting to stop the rest. Sometimes the latter does yeoman service in preventing a bad accident, but the crashing into a wall of granite blocks is not itself an experience to be lightly courted.

It is worth coming to the Andes for the sensation of being swung around half a dozen of these curves at the ends of the zigzags. They are not like ordinary 90-degree street-corner curves by any means; you swing through nearly two quadrants every time you double a bend, and the thing happens so quickly that you lose all track of your surroundings, miss some things altogether, and, again, observe anew the same peaks, glaciers, slides, and lakes to think each time they are fresh features in the landscape.

You swing off from a level mesa onto a steep descent; you are going south—and down. The driver lounges carelessly on his seat and gazes sleepily at his turned-up boot soles. The coach gains speed from the grade, and the horses run as though the fiends were after them to keep it from their heels. The gravel begins to fly, and the coach to rock, and the landscape fades to a dull blur as you jolt over a half frozen slide of earth and snow. Suddenly your hair rises in horror as you observe that a short 50 feet ahead the road ends abruptly against a stone wall. You turn toward the driver, and see that he, too, has observed the obstacle and is fully awake to the gravity of the situation. His whole figure is tense with excitement, and his eyes, the pupils contracted to pin points, are fixed upon the rocky barrier. But as yet he makes no attempt to check the flying horses, which, intent only on their endeavors to escape the flying coach, seem gathering themselves to leap over the wall and off into nothingness. Then, slowly, you see the reins leading to the horses on the near side begin to grow taut, and at the same time perhaps a little more slack runs through the driver's fingers to those on the "off."

That is all he does, but it proves enough. Just before you think the horses are going to launch themselves over the wall, you see the inside one suddenly stiffen, settle back upon its haunches and begin to mark time, quite after the manner of the man inside of a line of soldiers going around a corner. The action of the outside animal is just the opposite. He accelerates his speed, leans in at an angle of 30 or 40 degrees against his team mate, and with his hoofs clacking against the foot or side of the wall, dashes through a half circle of which the inner horse is the center. The other two horses describe concentric circles between these extremes, the whole team revolving as if on a pivot, while the coach is skidding wildly sideways on its outer wheels. As soon as the coach has swung around and righted itself, you are whirled to repeat the performance at the next bend.

An Hour with the Barracuda, by F. W. Sterling, in *Outing* for March is in truth, as the subtitle states "A Tale of Lively Sport in Leisure Hours off the Rio de Tuxpan in Mexico." The author's realistic descriptions of the various fish caught and the game fights they put up are calculated to make the disciples of Sir Isaac Walton who read *Outing* flock to Tuxpan in droves. As examples we quote:

The unfish'd reef, the Mecca of all sea anglers, furnished us an hour of sport long to be remembered. Our reef is 10 miles east of Rio de Tuxpan, Mexico, an atoll, an island in the making. Tuxpan lies about 6 miles up the Rio de Tuxpan.

White bass were reported just within the river mouth, but a heavy sea on the bar made this sport impossible, so it was decided to try our luck on the reef. * * *

Spoons were put far out from the reef, and while still a hundred yards off, "Zing"; and the Surgeon's reel was humming. One hundred, two hundred feet of line was gone and still going with the leather brake hard on and getting hotter every minute. Then,

with a great surface flurry, a veritable tiger of the sea leaped into the air, truly a forbidding yet graceful sight. When it fell back with a large splash we knew he was well hooked and it was but a matter of time before a new record would be made for the boat.

The boat was stopped and a pretty fight was on. It lasted about 15 minutes. At times the fish was reeled into sight and then was away with a rush that could literally carry the Nimrod overboard or smash all the gear if not anticipated; again he would jump, opening his great mouth and displaying his formidable teeth; he would rush the boat so swiftly that the reel could not handle the slack. At last, with circling rushes around the boat, this beauty was brought nearly to gaff, only to shy off at sight of the boat. * * *

Three hours after landing, this fish weighed 38½ pounds and measured 5 feet ½ inch. It was an oldster with a single tooth in its lower jaw; its pointed mouth resembled a bull-dog in that the lower jaw protruded slightly, and both jaws were lined with razor-sharp teeth on which a heavy lashing line could be cut as with a knife. * * *

The hour's catch, two rods, was 9 fish, 187 pounds of *Genus Spyraea*, species Barracuda, an hour of wonderful sport, considering the fact that every foot of line was well disputed. A shortage of fresh meat made this particularly acceptable. As food they are excellent, the young being particularly delectable.

Brazil, the Largest Republic in the World, is the title of a descriptive article dealing with that country in general and Rio de Janeiro in particular, written by Peter MacQueen, F. R. G. S., which appeared in a recent issue of the National Magazine, and also in a slightly changed form in the South American Journal for February 21, 1914, the latter publication crediting it to "The Bellman, U. S. A."

The usual points of interest are touched upon and the places that can be seen by the general tourist are described in an entertaining style, such as the following:

Wherever you go in Rio, there are two strange prominences that are in every prospect of the city. No tourist would fail to visit them. One is the Pan de Azucar (Sugar Loaf), a cone of bare granite 1,800 feet in height, standing at the water's edge at the entrance to the harbor, one of the gateposts of Brazil's front door. It was scalable at only one point by the boldest climbers, but the Germans at the beginning of 1913 finished to the top of it a marvelous aerial railway. By this railway you are lifted first from the powerhouse to a substation 900 feet above the level of the street. You are carried thither in a cage which is attached to an electric cable and pulled up by electric power. * * * I was dizzy already, although I had not made one-half the ascent. Very gingerly I entered the cage the second time, for the last ascent, and I kept very still for fear I might shake it down. At one point you are 1,100 feet above the ground and the feeling is exactly what it must be in an aeroplane. The solid ground has gone from underneath you and you are flying across a deep glen. Arrived at the top of the rock, the view is indescribably sublime. It surpasses all the views I have seen in Europe, Africa, or Asia. No words or pictures could give a gist of one's feelings on that wild sea rock. You feel like an albatross, away from all the haunts of men. Land and water, hill and mountain, valley, city, sea beach, and beaconing islands are all impressed in their wonderful beauty on the mind.

The second peak is the still loftier Corcovado, a vertical shaft of rock which springs right out of the midst of the houses to a height of 2,300 feet. Such strange forms of nature give an unreality to the landscape of a city. They are the essence of a poet's dream; they are things whose story no tongue can fitly tell. This scenery awaits a painter who can handle a great canvas and a vast impression. Grotesque shapes lost in the splendor of a flood of sunshine, a strand of dazzling white, a sea of turquoise blue, a verdurous forest ready to fall upon the city and swallow it in a cascade of living green—this is the palette from which the future painter of Rio must take his glorious colors.

PAN AMERICAN NOTES

ARCHITECTURAL COMPETITION FOR CUBAN CAPITOL.

A BEAUTIFUL capitol building, costing \$1,000,000, and containing adequate accommodations for housing both branches of the legislative body, will soon enhance the beauty of the city of Habana. A presidential decree promulgated on March 4 last provides for an international competition among architects of Europe and America for designs to be submitted within two months. The contest will be conducted under the direction of the Department of Public Works in conjunction with a special committee, consisting of the President of the Senate, the Speaker of the House of Representatives, the Secretary of the Senate, the Secretary of the House, and the Secretary of Public Works. The committee will select three from the preliminary designs and then allow a further extension of time, not to exceed 10 months, for the development of detailed descriptions and plans. From these three plans the committee will then choose the one which contains a majority of desirable features. All things being equal, plans of Cuban architects residing in Cuba will receive preference over foreign entries. Final selection will be made within 30 days after the three detailed plans are submitted, and work will be commenced within 30 days following. The authors of the other two preliminary plans will each receive cash awards of \$3,000, and their plans will become the property of the Government. The winner of the architectural contest shall have the right to construct the work. In this event he will receive as compensation 3 per cent of the total estimated cost, to be paid quarterly in proportion to the amount of work completed. In this connection mention should also be made of the committee appointed by President Menocal, upon the recommendation of the Secretary of Public Instruction and Fine Arts, to study and propose to the Chief Executive such construction as may be in keeping with the growth and expansion of the University of Habana. The appointment of this committee is in furtherance of the President's recommendation in his message to Congress of last November for the erection of new buildings to the university.

PRESIDENTIAL ELECTION IN BRAZIL AND COLOMBIA.

The regular election of President recently took place in two countries of South America, Colombia and Brazil. Early in February, Dr. José Vicente Concha was chosen Chief Executive of the Republic

of Colombia for a term of four years, commencing on August 7, the date of inauguration. In the elections held during March the United States of Brazil selected as their President Dr. Wenceslau Braz Pereira Gomes, who is now Vice President of the country. Dr. Wenceslau Braz will be inaugurated on November 15. The results of both the elections seem to have been received favorably in all quarters, as the choice in each case has fallen upon a statesman of ability and high character. President-elect Concha, as well as the President-elect of Brazil, has held a number of important public positions. A lawyer by training, Dr. Concha served as Minister of War in 1901 and a year later came to Washington as the Minister of that country. In Brazil the election of Dr. Braz to the presidency marks another step forward in his career. Also a lawyer by profession, he served as member of the State congress of Minas Geraes, and later as representative from that State to the national congress. He resigned this position to become President of the State of Minas Geraes only to relinquish the office shortly after upon his election as Vice President of Brazil.

THE PAN AMERICAN COMMITTEE OF VENEZUELA.

Information has just been received from Señor Don P. Ezequiel Rojas, the Minister of Venezuela in Washington, that the Department of Foreign Relations of his country has recently named the following gentlemen as members of the Pan American Committee: Señor Dr. Alejandro Urbaneja; Señor Dr. José Santiago Rodriguez; Señor Dr. Santiago Key Ayala; Señor Dr. Francisco Gerardo Yáñez; and Señor Don Pedro Manuel Ruiz. One of the resolutions adopted at the Fourth Pan American Conference at Buenos Aires, in 1910, it will be recalled, provides for the appointment of such a committee at the capital of each of the countries embraced in the Pan American Union. The executive officials of the Pan American Union take advantage of this opportunity to extend their greetings to the newly appointed members of the Pan American Committee of the United States of Venezuela.

FURS AND SKINS FROM SOUTH AMERICA.

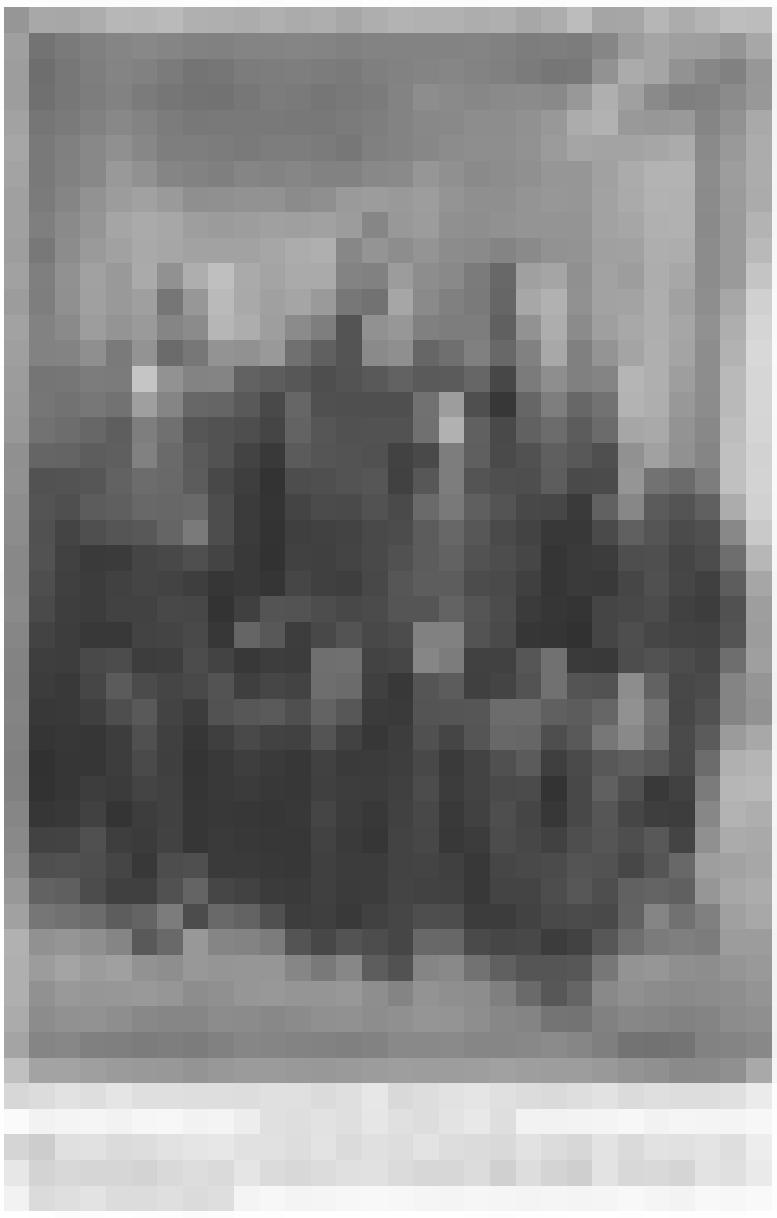
The interesting article on the general subject of furs in America, treated in the February (1914) BULLETIN, and presented in the Spanish Bulletin for March, 1914, gives opportunity to call special attention to the fact that much of the vast interior of South America is still but seldom hunted. In all probability there yet remains a field from which to draw supplies for the ever-increasing market in skins. In support of this statement comes a note from a daily paper in Bolivia



which says that the fur and skin industry of the country is capable of being developed into something most important, adding that "the forests of the Andean slopes of eastern Bolivia contain wild fur-producing animals, among which are fine specimens of tiger and many vicuñas." This is true also of other parts of the continent. It is at the same time acknowledged that over the better-known areas of South America the wild animals have become very scarce, and prices have consequently gone up. Nevertheless abundant game still exists and can be found by greater effort. The aboriginal inhabitant of the Andes was not a hunter, as was the Indian of North America, nor have his descendants pursued game instinctively to supply their wants. For this reason it would appear that the later commercial need for skins finds so much of the continent not yet invaded. As the governments have learned the lesson of conservation, it may be warrantably hoped that the wild animals remaining will continue to furnish a good supply of skins, but will not be slaughtered, as they have in the United States, in some cases almost to the point of extinction.

THE INCREASING TRADE OF AUTOMOBILES.

During the month of January, 1914, there was an increase of exportation of automobiles from the United States of 369 cars over the export in January, 1913. For the same period in 1914 there was a decrease of importations of 59 cars. This is given as an illustration of the popularity of the car made in the United States, for, although France still leads the world in the export of automobiles, the United States has made the most rapid gains. Another interesting feature of the situation is that the average valuation per car of the automobiles imported is higher than that of those exported, showing that in certain styles of luxurious car foreign makes are still considered superior to domestic cars. United States machines were sold last year (1913) in all parts of the world. Although Europe buys many cars, Canada continues to be the largest single customer for those made in the United States. Large increases are notable in the export to Australia, Asia, and Africa, while sales to South America have practically doubled. An interesting table recently compiled by Consul General Bartleman, at Buenos Aires, shows that the number of automobiles imported into Argentina from the United States during 1913 was 1,296, against 708 in 1912. The recent successful crossing of the Andes in a United States automobile, as well as the notable result of an endurance test in Uruguay, in which, according to a Buenos Aires newspaper, a triumph without equal was obtained for the United States car, are encouraging signs that the value of machines made in this country is becoming recognized.



ADDRESS BY SEÑOR DON FRANCISCO A. GODOY.

The keen appreciation of the desirability of mutual acquaintance and better understanding among the American nations is demonstrated in an especially gratifying manner by the younger men from these countries. In schools, colleges, churches, and clubs, meetings frequently are given over to the discussion of international questions of timely interest, and Latin America receives no small amount of attention. It is at these gatherings that the young students from Central and South America are afforded opportunity to present their views, and the earnestness of these speakers is notably impressive and effective in creating a sympathetic understanding of local conditions. The attention of the **BULLETIN** has just been called to an address delivered by Señor Don Francisco A. Godoy, son of the Mexican Minister to Cuba, before the Business Men's Class of the United Brethren Sunday School at Greensburg, Pa., Sunday morning, March 29. The **Morning Review** of Greensburg, in its issue of the following day, makes the following comment on Señor Godoy's discourse:

The 140 members of the class present listened to a very interesting address on the Mexican situation delivered by Francisco A. Godoy, son of the present Mexican Minister to Cuba. His father was Chargé d'Affaires of Mexico in Washington for many years, and the young man received his education in the Washington schools. He is now employed in the Pittsburgh district by the Du Pont Powder Co. Señor Godoy is pleasantly remembered in Washington by his former associates at the Pan American Union and his numerous friends and acquaintances at the National Capital.

WESTERN TRIP OF THE DIRECTOR GENERAL.

In preparation for its extended tour to South America, the Business Men's League of St. Louis, Mo., invited the Director General to deliver an address at its members' conference luncheon, on Wednesday, March 25, at the Mercantile Club. Mr. Barrett pointed out the opportunities for increasing the exchange of trade between St. Louis and its neighboring cities in the middle west with the countries of Latin America. He also spoke of the advantages to be derived from this tour, urging the necessity of an intimate study of the Panama Canal, and calling attention to its influence, when opened, upon Pan American relations. We quote below in part from **Forward St. Louis**, the official paper of the organization, which, in its issue of March 23, makes the following reference concerning the proposed tour:

With a volume of foreign trade already approximating \$50,000,000 a year, St. Louis is undertaking expansion in the Latin American field. April 4 an official delegation representing the Business Men's League will set sail from New York on an extended

tour of the principal countries on the east coast of South America, and this party will devote its energies toward fostering reciprocal commercial relations.

At first the executive committee felt disposed to send a large party of a hundred or more business men to South America and exploit St. Louis as the world's greatest inland manufacturing and jobbing center and as an inland port of widening influence; but this idea was soon abandoned, because a large party would prefer sight-seeing to investigation, and it would be too unwieldy to produce material results.

The league did not care to flash the greatness of St. Louis only in a momentary glow. It wanted to leave a lasting impression on South American business men. The league desired, above all, to obtain the most reliable information and the vital facts about commerce in South America, and to establish relations which would be advantageous permanently both to St. Louis and the large cities of Latin America. The following day Mr. Barrett spoke to the students of the Central High School of St. Louis. On Friday, March 25, he was the principal speaker at the Pittsburgh Traffic Club.

INTEREST IN PAN AMERICAN CONFERENCE.

One of the most pleasing indications of the widespread interest manifested in the relations of the 21 independent Republics of the Western Hemisphere which comprise the Pan American Union is found in the surprising number of requests for the program of the Fifth International American Conference, which will assemble at Santiago, the capital of Chile, in November of the present year. These continued requests from all parts of North and South America are undeniable evidences of the growing interest in Pan American affairs, and express clearly the desirability of developing better understanding and still closer relations between the peoples of America. The special attention, moreover, which this conference of American States is attracting may doubtless trace its origin to the exchange of visits by representative statesmen and scholars, and to touring parties of prominent professional and business men. In response to the general demand, there is printed in another column of this issue the full program of the coming conference, together with other information. Although the program may be obtained in pamphlet form, the supply is diminishing so rapidly that it has been deemed advisable to reproduce it here in full for permanent reference.

CLUB INTEREST IN LATIN AMERICA.

To those who closely follow the varied and increasing manifestations of Pan American interest it is a source of much satisfaction to observe the practical forms in which these find their expression. Scarcely a week passes but the attention of the **BULLETIN** is called to the organization of some new club for the study of Spanish literature and the Spanish language, or to a society conducting a course of reading of the fascinating histories of the countries of Central and

South America, or the formation of a general symposium including open discussions of international questions concerning the relations of the countries of America. Such interest is of especial significance, indicating as it does the general appreciation of the importance of developing better acquaintance, more intimate knowledge of each other, and thus further cementing the ties of friendship between the independent nations of the Western Hemisphere. In this connection the BULLETIN is pleased to mention the organization of the Spanish Club of Akron, Ohio, composed of about 50 of its prominent citizens, for the purpose of studying the Spanish language and literature. The secretary of the association, which is called El Club Español de Akron, is A. F. Connolly. From New York comes the announcement that a number of men of the evening session at the College of the City of New York have organized a society which they have named the Circulo Ibero-Americano. The object of this organization, according to L. D. Whyte, the secretary, is to make its members more familiar with all things Spanish. In response to continual requests from schools, colleges, and clubs, the Pan American Union has in preparation a pamphlet containing a selected list of books, classified according to subjects, for readings on the countries of Latin America.

SIXTH INTERNATIONAL CONGRESS OF CHAMBERS OF COMMERCE.

That the Sixth International Congress of Chambers of Commerce which will assemble in Paris commencing June 8, 1914, will be a worthy successor to the gathering held in Boston in 1912, is clearly indicated by the program of the Congress, a copy of which has been received by the Director General. In a communication from the Boston Chamber of Commerce, James A. McKibben, its secretary, advises that special arrangements are being made, at the request of a number from the United States who are planning to attend the congress at Paris, to have all the delegates join in a single party. According to the tentative program, the party will sail from Boston on the Cunard Line steamer *Laconia* on Tuesday, May 26, arriving at Liverpool Wednesday, June 3. Several days will be spent in visiting Liverpool, Manchester, and London, at which place the delegates will be the special guests of the London Chamber of Commerce. The party will then proceed to Paris, leaving London on the 7th, and will gather at the opening session on Monday morning, June 8. The organizing committee at Paris has arranged an excellent program, including, in addition to the business meetings, visits to places of interest and sight-seeing tours of the city. Upon the conclusion of the official sessions a two weeks' tour is to be made through many of the most interesting cities of France, concluding with a visit to the Alps.



TRIBUTE TO PAN AMERICAN UNION.

The executive officers of the Pan American Union deeply appreciate the kind reference contained in *Forward St. Louis*, the official organ of the Business Men's League of St. Louis, issue of March 23, 1914, in regard to the assistance rendered to that commercial body in working out plans and details for a South American tour of a number of its representative members. It is a pleasure to quote the following extracts from that article:

The real value of the Pan American Union to the commercial interests of the United States has been demonstrated to the Business Men's League in planning the South American trip. Director General John Barrett and his staff have not only responded quickly and earnestly to every request submitted to them by the league, but they have exceeded promises and expectations in arranging for the comfort of the party and the success of the expedition.

It is difficult to perceive how the commercial interests could make much headway in the Latin American countries without the intelligent cooperation of the Pan American Union's organization. And it is apparent, too, that the Union can be, and no doubt is, of great value to the United States Government. * * *

What the Union does for St. Louis, it does also for Rio de Janeiro, Buenos Aires, Mexico, Lima, and every Latin American city, large or small. What it does for the United States, it does for Brazil, Argentina, Chile, and every country in South and Central America. The benefits of the Union are cooperative.

The working organization of the Union is perfect. It operates quickly and successfully. The Union has the sentiment of all American nations behind it. Pan American in every respect, the Union is uniting countries of North, Central, and South America in a common patriotism.

REPRINTS OF NOTABLE SPEECHES.

Among the latest publications issued by the Pan American Union for distribution there has been received from the press a number of pamphlets containing the addresses delivered at the Fifth Annual Convention of the Southern Commercial Congress, which met in Mobile, Ala., October 27-29, 1913. The speakers on that occasion included President Woodrow Wilson, Señor Don Joaquin Bernardo Calvo, the Minister of Costa Rica; Señor Don Ignacio Calderon, the Minister of Bolivia; Señor Don Federico Alfonso Pezet, the Minister of Peru; Señor Dr. Eusebio A. Morales, the Minister of Panama; Señor M. J. Ferreira da Cunha, Consul General of Brazil at New York; and Director General Barrett of the Pan American Union. Owing to pressure of official business in Washington, Secretary of State Bryan was unable to attend the congress, but sent a letter to the congress which was read at the Pan American session and is included in this reprint. The importance and high character of all these addresses have created a general demand for copies of them and they have therefore been reproduced under one cover. These pamphlets may be had upon request by addressing the Pan American Union.

CALL FOR DELEGATES TO SANITARY CONFERENCE.

The Pan American Union takes pleasure in directing attention to the official correspondence in regard to the call for the Sixth International Sanitary Conference to be held in Montevideo, Uruguay, December 13-21, 1914. This gathering will assemble under the auspices of the Government of Uruguay and will be presided over by Dr. E. Fernández Espiro. Complete data and the tentative program are printed in full elsewhere in this issue. It is earnestly hoped that representatives will be delegated from every American Republic to participate in the proceedings of this conference which is doing such an important work in maintaining and promoting the highest standards of hygiene and sanitation in the Republics of America.

FOURTH INTERNATIONAL RUBBER CONGRESS.

Previous mention has already been made in the columns of the Bulletin concerning the Fourth Rubber Exhibition and International Rubber Congress which will be held at the Royal Agricultural Hall, London, June 24 to July 9, 1914. Further advices from London urge all those who plan to participate in the discussions or who desire to either submit or read papers dealing with any subject connected with the growing, curing, or manufacture of rubber, or the possible expansion of its uses, to register their names as early as possible with the honorary secretaries of the International Rubber Congress, exhibition offices, 75 Chancery Lane, London, W. C. The papers read at the congresses of 1908 and 1911 by planters, chemists, and manufacturers in connection with the production of rubber, together with the discussions which followed, have been reproduced in two books that remain valuable works of reference on every question of the rubber industry. These gatherings serve to bring forth the experience of experts from every rubber growing country in the world and rank among the most important industrial conventions held.

ARGENTINA HONORS BOSTON.

Señor Dr. Rómulo S. Naón, Minister of the Argentine Republic to the United States, has informed Mayor James M. Curley, of Boston, that the people of Argentina are to present to Boston a bronze statue of Sarmiento—Dr. Domingo Faustino Sarmiento—a former President of that country and one of its great national heroes and patriots. The mayor suggests that the statue be placed in front of the city's public library, a fitting place indeed for this monument to such a man. The gift is a tribute to the United States, and par-



ticularly to Boston itself, because of the great love shown by Sarmiento for that country, and because in Boston he received, especially from Horace Mann, such abundant encouragement and assistance in his plans for the establishment of a thorough educational system in his own country. The money for the statue is obtained from popular subscription. Sarmiento's name is as venerated in Argentina as is that of Lincoln in the United States, and there is a strong parallel to be drawn between the lives of the two men. Both were born far removed from the activities and ambitions of the city; both had a hard struggle to gain that self-education which each craved; both worked up from poverty and obscurity to prominence and to the presidency of the nation, the highest gift at the hands of the people; each saw his country torn by civil war and factions made bitter by political dissensions. But both lived to see peace and an approaching prosperity about to crown their efforts. Both also believed with an unswerving faith in the foundation of the republic upon education. Therefore a statue of Sarmiento in Boston means much as a proof of the fundamental friendship between the two peoples.

TABLES OF DEPTHS IN CHANNELS AND HARBORS.

The United States Coast and Geodetic Survey, Department of Commerce, has issued a revised edition of this Tables of Depths, and copies of it may be obtained free from that department on application. This volume must be of interest to vessel owners, masters, port authorities, and others who should have knowledge on these matters, for, from the increased shipping stimulated by the opening of the Panama Canal, a greater number of entries into all harbors mentioned is to be expected. At present this table, with information of the depths in the principal ports, channels and anchorages, covers the United States, Alaska, Porto Rico, the Canal, Hawaii, Philippine Islands, Marianas Islands, and Samoa.

MEETING OF MEDICAL CONGRESSES.

Announcement has just been made of the meeting dates of two important medical conventions, the Seventh Pan American Medical Congress and the Sixth Latin American Medical Congress. A recent communication from Señor Don Federico Alfonso Pezet, the Minister from Peru in Washington, conveys the information that at one of the closing sessions of the last Latin American Medical Congress held at Lima, Peru, the city of Habana, Cuba, was designated as the place for holding the sessions of the sixth conference in August, 1917, and further states that the Seventh Pan American Medical Congress will be held at San Francisco in 1915.

TO STUDY SOUTH AMERICAN CULTURE.

In the February number of the *BULLETIN* announcement was made of a proposed study tour under the auspices of the American Association for International Conciliation for the purpose of studying the intellectual and cultural development in South and Central American countries. Additional information is now at hand from Dr. Henry E. Bard, director of the Pan American division of the association, in which he states that this party will sail from New York on May 30. College and university professors, to the number of about 15, will devote 10 weeks to the tour in an endeavor to further international peace by drawing closer the cultural and intellectual relations between the United States and the Republics to the south. The itinerary as outlined includes stops at the following points: Barbados, Bahia, Rio de Janeiro, São Paulo, Montevideo, Buenos Aires, Santiago, Valparaíso, Coquimbo, Antofagasta, Arica, Mollendo, Callao, Salaverry, Pacasmayo, Eten, Paita, Panama, Colon, Cartagena, Puerto Colombia, Santa Marta, and Kingston. The party will return to New York, August 20.

INTERNATIONAL QUESTIONS AT PHILADELPHIA.

The meeting of the American Academy of Political and Social Science held in Philadelphia Friday and Saturday, April 3 and 4, 1914, was interesting, and special credit is due to Dr. L. S. Rowe and Prof. Emory R. Johnson for carrying it through to a successful consummation. The general topic under discussion was "Present International Relations and Obligations of the United States." Under this head the present status of the Monroe doctrine was discussed by the following speakers: Director General Barrett, presiding officer, first session; Rear Admiral F. E. Chadwick; Rear Admiral C. M. Chester; Hon. William A. MacCorkle, LL. D.; Leopold Grahame; John H. Latané; J. S. Daugherty; A. J. Montague, presiding officer, second session; A. Maurice Low; Joseph Wheless; Charles M. Pepper; Charles H. Sherrill. "The Mexican Situation: Its Problems and Obligations" was discussed by the following: Willard Saulsbury, presiding officer, third session; Albert Bushnell Hart; Hon. Henry Lane Wilson; Señor Don Roberto V. Pesqueira; Frank W. Mondell; Austen G. Fox, presiding officer, fourth session; Simon N. Patten; Alfred Bishop Mason; Leslie C. Wells; Maj. Cassius E. Gillette; L. S. Rowe. "The Policy of the United States in the Pacific" was discussed by the following: Rear Admiral C. H. Stockton, presiding officer, fifth session; Ellery C. Stowell; Rear Admiral Richard Wainwright; T. Iyenaga; J. G. Kasai. And "The Elements

of a Constructive American Foreign Policy" was discussed by the following: T. P. Gore, presiding officer, sixth session; W. Morgan Shuster; John Sharp Williams; John Temple Graves; Edward W. Townsend.

INDUSTRIAL HYGIENE IN CHILE.

The large industrial establishments in the United States, as well as in many other parts of the working world, are giving better and closer attention to the welfare of their employees, and every such step is a credit to civilization. It is a pleasure, therefore, to call attention, as has been done in former instances, to progress of this nature in Latin America, where much has already been done and where more will be done in the future to benefit the community in which labor is the largest factor. The recent improvements suggested in the mining expansion of the copper region of Chile is a case in point. The company that has just purchased the mines at Chuquicamata estimates the ore deposit at about 200,000,000 tons, and to remove this quantity it will be necessary to excavate 5,000,000 more cubic yards of earth than were removed in cutting the Panama Canal, and that to get out the known ore wages paid to Chilean labor will amount to \$225,-000,000. To protect these laborers, therefore, so that they will have the best surroundings while at work, the company is now building a model city at the mines. The preparation for the health, comfort, and pleasure of the community shows great foresight. There will be a soldiers' barracks, public schools, a theater, a hospital and quarantine, churches, a public library, besides, of course, thoroughly equipped dwelling houses. Electric light and power is to be supplied, and drainage will be of a scientific character. Thus on the mountain there will spring up a city which will be an example. It will try to become and to maintain itself as the most healthy city in the country, and the working people there will have opportunities for hygienic living not always obtainable in more highly developed parts of the world.

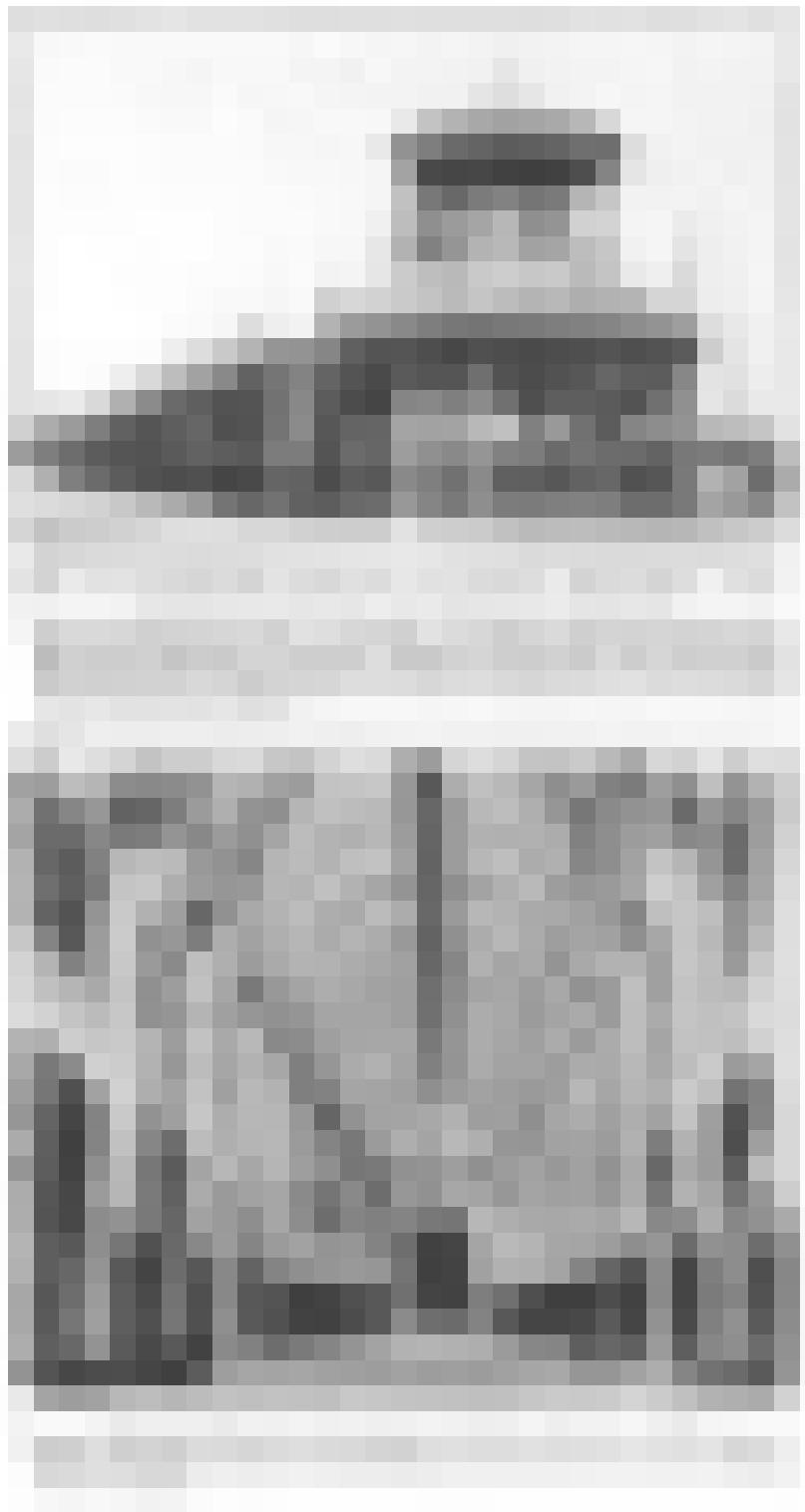
THE "LAPLAND" TO CRUISE AROUND SOUTH AMERICA.

Another important move which reflects the interest of the general public in Latin American countries is the announcement that the magnificent steamship *Lapland* is to cruise around South America with a large party of tourists and business men. The *Lapland* belongs to the Red Star Line and is a popular vessel engaged in trans-Atlantic passenger traffic. She is of 28,000 tons displacement, has a length of 620 feet and a breadth of 70 feet, and is known as a very

steady vessel. There are many cabins de luxe; the decks are spacious and some of them inclosed with glass; and one of the large dining saloons is to be used exclusively for entertainments, such as amateur theatricals, lectures, motion-picture plays, etc. The cruise will be under the management of the Gates Tours Co., of Toledo, Ohio, a firm that has long been successful in conducting tours to Mexico, the West Indies, Alaska, and other parts of the world. Shortly after the announcement was made, 150 persons had engaged accommodation for the entire cruise, a fact which assures the consummation of the well-planned enterprise. The start will be made from New York on January 23, 1915. The first call will be Habana, where the vessel will remain two days; the next stop will be at Kingston, Jamaica, and passengers will have one day of sightseeing in that interesting port; the passage through the Panama Canal will follow, with a stop in Panama City. From the latter port the *Lapland* will sail for Callao, Peru, and remain in port several days, thus permitting the tourists to proceed by rail to the Peruvian capital, 8 miles inland. Sailing from Callao, the ship will visit the leading ports of Peru and Chile and finally pass through the Strait of Magellan or around Cape Horn, calling in turn at Buenos Aires, Montevideo, Santos, Rio de Janeiro, Bahia, Para, Port of Spain, San Juan, Nassau, etc., and is due in New York on April 11. The entire cruise will cover a period of 78 days and the distance traveled will be more than 18,000 miles. The commercial phases and the opportunities offered business men to become personally acquainted with possibilities and conditions all over South America, judging from the applications for membership in the party, appear to be quite as popular as those from the tourist standpoint.

EXPOSITION OF UNITED STATES PRODUCTS IN CHILE.

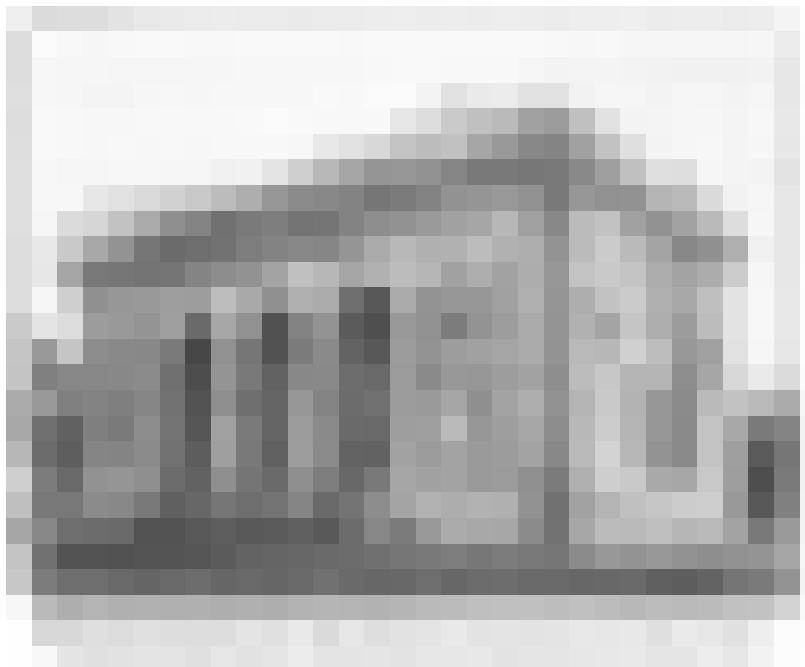
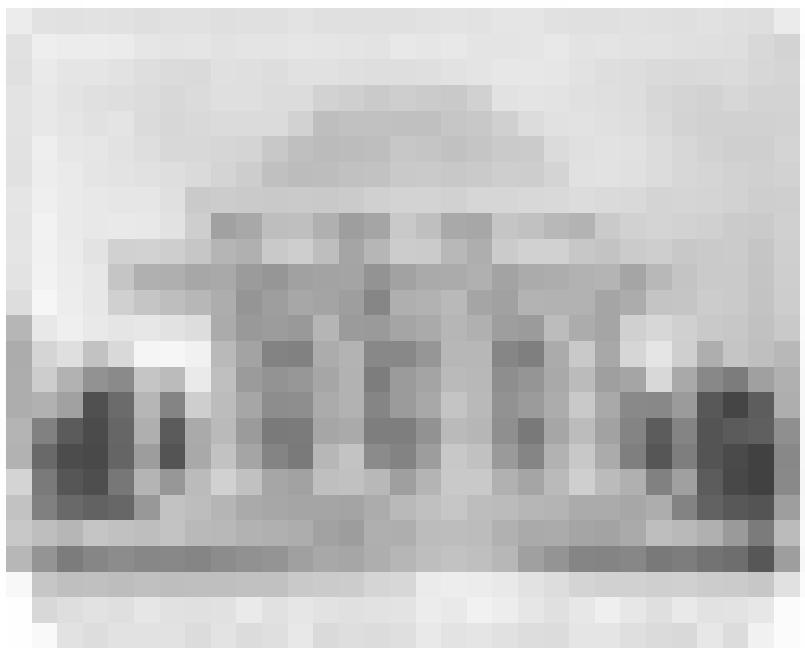
The organization of the Chilean-American Permanent Exposition Co., for the purpose of placing before the people of Chile the machinery, manufactured articles, and other products of United States industry and commerce, reveals a combined effort on the part of North American and Chilean interests to bring these two countries together into still closer ties of friendship through an increased exchange of commerce. It is the plan of this company to establish a permanent exhibition of these products at Santiago, Chile, and the Chilean Government has evidenced its sympathy with the movement by placing at the disposal, free of charge, the spacious exposition building erected for the Chilean Centennial Exposition in 1910. In turn, the interest of the United States in this effort to further promote the commercial relations between it and the Republic of Chile, will be



evidenced at the opening of the exposition in November. At that time it is hoped the Secretary of State of the United States, who will be in attendance at the Pan American Conference, will honor the occasion with his presence and formally open the exposition. Mr. A. Hamilton West, the manager of the company, is at present in the United States working out details of the exposition. He may be reached in care of Señor Don Ricardo Sánchez Cruz, the consul general of Chile in New York City. Mr. West was formerly United States vice and deputy consul at Valparaiso. This exposition in Chile, on the West Coast of South America, has its counterpart on the East Coast in the exhibition sample rooms of the Chicago Association of Commerce at Buenos Aires.

COMMERCIAL INFORMATION ON LATIN AMERICA.

With the March issue of the BULLETIN the commercial reviews of the various countries of South and Central America for the past year have been brought to a close. In the same issue there was also published the general survey of the foreign trade of Latin America with special attention directed to the distribution of this commerce, the percentage of increase or decrease, and the general character of the trade. These reviews have formed a feature of the BULLETIN for many years, and are the subject of favorable comment on the part of representative commercial organizations, exporters and importers, and others interested in the upbuilding of a greater commerce between the United States and the other American Republics. In accordance with our custom the statistical reviews with up-to-date descriptive data are now available in pamphlet form for each country separately and may be secured gratis upon application to the Pan American Union. In this connection the BULLETIN is pleased to note the expressions of commendation it has received on the series of articles entitled *A Commercial Traveler in South America*, which commenced with the January, 1914, number. The first two of these articles have been reprinted in pamphlet form to meet the demand from commercial organizations, commercial travelers, and big business interests. Especially great has been the request from concerns which contemplate sending representatives into the South American field and desire to obtain first-hand practical information as to itineraries, matters of money and credit exchanges, climatic conditions, and other details essential for the person traveling to these countries for the first time.



ADDRESS OF HON. ROBERT BACON AND OTHERS AT REPUBLICAN CLUB.

How to draw the countries of Latin America and the United States into closer relations was the topic which engaged the attention of nearly 150 guests at the nonpartisan Saturday discussion of the Republican Club of the city of New York on Saturday, March 21, at the quarters of the association, 54 and 56 West Fortieth Street. The meeting was one of a series of Saturday luncheons, followed by a program of speeches on some topic of general interest, held under the auspices of that club. "How can Latin America and the United States be drawn into closer relations?", the subject of the day, proved to be of unusual interest, and the speeches delivered on this occasion made a favorable impression upon the listeners and stimulated much enthusiasm. The speakers, well known in Pan American circles, included such men as Hon. John L. de Saulles, the United States Minister to Uruguay; Hon. George W. Wickersham, former United States Attorney General; Hon. Robert Bacon, former Assistant Secretary of State and ambassador to France; Hon. Charles H. Sherrill, former United States minister to Argentina; Señor Don Manuel Gonzalez, consul general of Costa Rica in New York; Dr. M. de Moreira, of the United States and Brazil; Señor Don José Roura, of Cuba; Rev. David J. Burrell, D. D., chaplain; and Mr. W. A. Reid, of Pan American Union staff. Mr. Edward F. Cragin presided. Of especial historical interest was the address of Mr. Bacon, who recently returned from a tour of South America, under the auspices of the Carnegie Endowment of International Peace, where he spoke at a number of the capital cities. He traced the growth of Pan Americanism from its early beginnings under Henry Clay through its more marked advancements under Secretary of State James G. Blaine. He then directed attention to the service rendered to Pan American relations by the South American tour of Hon. Elihu Root, as Secretary of State. Referring to the various activities of the Carnegie Endowment for the promotion of better understanding and international peace, especially among the nations of the western hemisphere and of his own trip to South America, Mr. Bacon said:

We hear a great deal said about "Latin America," but error is sure to arise from any consideration of Latin America as a whole, for its republics and the peoples who compose them differ as radically as the governments and peoples of the several European States differ from each other. But the citizens of our sister republics of this continent, or, at least, those with whom I have had the pleasure to be brought in contact, possess certain characteristics in common. They are animated by lofty ideals and the most ardent patriotism. Any movement which has humanitarian purpose is sure to receive their cordial support. The extreme friendliness and courtesy of my reception as the representative of the Endowment for International Peace, the unfailing kindness of all those in official and unofficial life, and spontaneous

response and cooperation that was everywhere found have left an impression I shall never forget.

All of the countries which I visited gave every evidence of sincere friendship for the United States. We are traditionally bound together by ties of nature and history and by similar struggles for independence, common love for liberty, and the fact that we live on the same hemisphere under republican forms of government. These bonds of sympathetic union are, I believe, much more keenly appreciated by our neighbors than they are by many of our citizens. * * *

Our ignorance of the affairs, past and present, of the nations to the south of us is too apparent to be denied. We do not realize the tremendous obstacles they have overcome, and we are only very slowly learning to appreciate the greatness of their resources, the magnitude of some of the States, their incalculable wealth, their present strength and greatness and certain brilliance of their future, and the loyal patriotism and devotion of their people. In order to know our neighbors to the south and to understand their sentiments our people must know their heroes. We must know their histories, their ideals, their sublime feats of courage, their temptations, their weaknesses, their failures, and their victories if we really wish to understand the hearts of these neighbors of ours who at all times have been ready to lay down their lives in the cause of freedom. It is only by such understanding that we can really be drawn more closely together. The ties of trade and commerce will serve but little purpose if we fail to establish closer bonds of mutual sympathy and intellectual union. * * * Mr. Bacon concluded his remarks with a plea for reciprocal relations. "We must demonstrate to them our sincere desire for American solidarity by acts of friendship," he said, and then quoted the words of President John Quincy Adams in a message to Congress apropos the appointment of envoys to the Pan American conference called together at Panama by Bolívar:

"The first and paramount principle upon which it was deemed wise to lay the corner stone of all our future relations with them (our sister American republics) was disinterestedness; the next was cordial good will to them; the third was a claim of fair and equal reciprocity."

These sentiments, which served as the "corner stone of all our future relations," are applicable to-day as when they were written, 88 years ago. The address of Mr. Bacon, which entered more extensively into historical details underlying peace and friendship, was preceded and followed by more or less informal addresses by other speakers whose names have been mentioned, and whose remarks were enthusiastically received. At the close of the meeting, and upon invitation of the representative of the Pan American Union, many members of the club availed themselves of the privilege of securing information and data prepared by the Union.



BOOK NOTES

The South American Tour. By Annie S. Peck. Illustrated chiefly from photograph, by the author. New York: George H. Doran Co. 398 pages and a map. Prices \$2.50.

The author of this book, Miss Annie Peck, needs no introduction to students of South American affairs, because she has devoted so much of her life and energy to this chosen field and because her former publications have demonstrated her ability to record her experiences and impressions. Therefore the reader expects to find the book full of practical information, well seasoned description, and sensible advice, much of it gathered from personal experiences on the spot. Reading the book justifies the expectation. This is a fine attempt to prepare for the public a comprehensive guide-book on what may be called the tourist areas of South America; that is to say, to place between two covers a running commentary on what the traveler should see, and how best to be able to see it, in the usual tour of the continent extending over four to six months. Miss Peck has successfully accomplished this purpose. She divides the book into 33 chapters, beginning with an analysis of what the tour is, how and when to go, and the cost. Then (Miss Peck seems to select the route down the west coast and up the east coast) follow details on Panama and the canal, Ecuador, Peru, Bolivia, Chile, Argentina, Uruguay, and Brazil. There is given also a side trip to Paraguay and the Falls of Iguazu. The omissions are of the Guianas, Venezuela, and Colombia. It is not claimed that Miss Peck has visited every spot mentioned in "The South American Tour," nor that mistakes can not be discovered in what is explained or described. Mistakes are, however, commendably scarce, and the personal touch in much of the text gives a charm to the pages which few guidebooks and not even many volumes of travel possess. Details as to hotels, railways, art museums, etc., are freely given, so that the stranger finds many a sensible suggestion, both as to how to travel and how to amuse himself with whatever sightseeing the various places can offer to the tourist. The final chapter touches the great problems of South American trade, and gives simple truths which even the tourist may find interesting. The 87 photographs illustrate well the conditions described and are carefully chosen. The map is serviceable, though small. It can in all justice be stated that Miss Peck has added an original and needed volume to the growing literature on South America.

A. H.

A Spanish Grammar. With exercises in translation and composition, reading lessons, list of idioms, and a glossary. By William A. Kessen, teacher of Spanish, Hillhead High School, Glasgow. William Blackwood & Sons, Edinburgh and London. 303 pages, small 12^o. 3 shillings and 6 pence (about 80 cents).

Brief Spanish Grammar. By E. S. Ingraham, associate professor of romance languages, Ohio State University. D. C. Heath & Co., publishers, New York. Small 12^o. \$1.10.

That the study of Spanish must be popular is evidenced by the many grammars of that language coming from the press. Some are quite new, others are completely revised and brought up to date, while a few are condensed editions of larger works that are suited for advanced linguistic study. These two smaller grammars recently added to the library of the Pan American Union are of the practical kind, attempting to give in a condensed form all the elements of grammar needed for a working knowledge of reading or expressing one's ideas. They are carefully prepared by scholars, and serve their purpose. Any student using either of these books can acquire the necessary rudiments of Spanish, and ought to find through them a trustworthy introduction to the larger field of that beautiful language.

La Vida de Vasco Núñez de Balboa. Por D. Manuel José Quintana. Edited with notes and vocabulary by George Griffin Brownell, professor of romance languages, University of Alabama. Ginn & Co., Boston. 112 pages. Price, 65 cents.

Manuel José Quintana (1772-1857), the author of the life of Balboa, was a Spanish author full of lofty patriotism, who did much to arouse his countrymen to a spirit of nationality and who through his writings made a name for himself in Spanish literature. In his "Vidas" Quintana presented to the people a historical series of the lives of Spain's great men of action, but he did not complete his purpose, as so many other tasks and duties intervened. Among his best known lives, however, is that of the explorer and discoverer of the Pacific Ocean, Vasco Núñez de Balboa, whose name will always be associated with that of Panama. It is a Spanish classic, and the editor has done well in presenting this edition to English readers who wish to study such a composition, but who may need, perhaps, the help of a specially prepared vocabulary and the explanatory notes given in this edition. Especially at this time, when Balboa's name is attaining the fame it deserves, does such a book prove helpful in showing what a beautiful language is pure and classical Spanish.

La América del Sud. Observaciones e Impresiones. Por James Bryce. Traducido al Castellano por Guillermo Rivera. (South America, by James Bryce, translated into Spanish by William Rivera.) With maps. The Macmillan Co. 1914. New York. 475 pages. Price, \$2.50.

The well-known work in English of the lately retired British ambassador to the United States has now appeared in this Spanish translation, and will undoubtedly be read by those who either could not obtain the book in its English form or who will appreciate it the more because of its availability in the language of the countries about which most of the chapters are written. There are 16 chapters, the first beginning with the story of Panama and its Isthmus, the next 5 being devoted to the study of the main features of the west coast of South America. Chapter VIII describes the author's trip through and impressions of Magellan's Strait, while Argentina, Uruguay, and Brazil have each a chapter to themselves. The last 5 chapters are given to a discussion of the general conditions characteristic of all South America, touching on the development, races, relations to Europe, political features, observations, and prophecy. What the author has to say on any topic must be well worth reading, as his profound study of other vital questions of social phenomena bear constant witness. What he particularly has to say about South America is the reflection of a thorough preliminary preparation for this book, added to a carefully planned tour of each country discussed. Presented in this Spanish dress the ideas lose nothing of their vigor, and in a certain sense even gain in charm by the use of this excellent Castilian. For those who may wish to read the "South America" of Mr. Bryce for the first time, or to follow his ideas by means of the Spanish, this book can be strongly advised.

A. H.

Almanach de Gotha. 1914. This genealogical, diplomatic, and statistical annual, the one hundred and fifty-first edition, is now on the shelves of the Library of the Pan American Union, and needless to say is one of the most frequently consulted reference books. The articles on the Republics of Latin America contain data which meet many purposes, and are sufficiently complete for ordinary wants. The series of the back years provide an invaluable source of information on points that in some cases can not be otherwise so satisfactorily settled.

Hazell's Annual for 1914. Twenty-ninth year of issue. While Hazell's occupies a somewhat different field from that of the Almanach de Gotha, it is at the same time of equal merit and value for the quick and trustworthy appeal to a contemporary authority. One feature of the annual is the concise history given therein of the progress of the past year, and the description of political activities on many vital questions. Hazell's also is freely consulted in the library.

The Gazette-Times (Pittsburgh) Almanac, 1914. A carefully prepared index of the events chiefly within the United States, with quite extensive references to the events in the sporting world and records made. Price, 25 cents.

The Commercial Guide and Business Directory of Porto Rico. A classified directory of the business interests of the island. Published by F. E. Pratt, 32 Bond Street, New York City; 12 Allen Street, San Juan, Porto Rico. Price, \$2.

The Coal Resources of the World. An inquiry made upon the initiative of the executive Committee of the Twelfth International Geological Congress, Canada, 1913, with the assistance of geological surveys and mining geologists of different countries. Edited by (members of) the Geological Survey of Canada. With plates and illustrations in the text and accompanied by an atlas of maps. Three volumes, with atlas. Publishers, Morang & Co. (Ltd.), Toronto, Canada. 1913. Price, \$25.

These three splendidly published volumes on the coal resources of the world represent undoubtedly the latest research into this very important supply for human needs. The subject is exhaustively treated, and every available item of information, in whatever degree it may apply to our knowledge of coal and its location on the globe, is here given in extensive form. There are numerous tables related to the statistics on coal, and abundant chemical and geologic data to accompany the general subject. In the pages devoted to Latin America are given summaries of the coal areas of Honduras, Guatemala, Salvador, Costa Rica, Nicaragua, and Panama, in Central America; Colombia, Venezuela, Ecuador, Peru, Brazil, Bolivia, Uruguay, Argentina, Chile, and Paraguay, in South America. The West Indies, British Honduras, and the Guianas are also mentioned. The best-known fields of the world—United States, England, Germany, Japan, and Australia—receive full attention. These three volumes, quarto, 1,360 pages in all, have illustrations in the text, but the atlas, twice the size of the volumes, has 68 pages of maps, most of them geologically colored. This publication is issued with the same purpose as the Iron-Ore Resources of the World (in two volumes). Certainly they must be authoritative, and belong in every library which may have a call for works of this standard character.

Royal Spain of To-day. By Tryphosa Bates Batcheller. Longmans, Green & Co. New York, London, Bombay, and Calcutta, 1913. Large octavo. 614 pages. With 5 photogravures, 6 color plates, and 80 half-tone plates on cameo plate paper. Price, \$5. (Dedicated by special permission to Their Majesties the King and Queen of Spain.)

The present volume gives us an interesting picture of Spain of to-day. The book is largely an account of a motor trip across the Spanish Peninsula, taken with Her Royal Highness the Infanta Eulalia, and in these pleasant chapters are found many an effective description of society, art, and architecture, and of the social reawakening of the country. The style is lively, and there are charmingly introduced many intimate letters to the authoress from her friends among the royal family of Spain. As it must be remembered that Spanish America owes much of its customs, traditions, and manners of thought to the Spain to which it looks back as the mother country, so a knowledge of the Spain of the present is of vital importance in interpreting the character and movements in this part of the western world. To study Spanish America through the keen eyes of such a writer and observer is therefore to gain additional insight into the republics speaking a common language.

The Continents and Their People. South America. A supplementary geography. By James Franklin Chamberlain, State Normal School, Los Angeles, and Arthur Henry Chamberlain, Pasadena, Cal. New York: The Macmillan Co. 12mo. 189 pages, illustrated. Price, 55 cents.

As the title-page states, the book is a supplementary geography, written for study in schools and for use in connection with geographies. It accomplishes its purpose well

by giving a pleasing picture of each republic of South America, as well as of the Guianas, with special chapters devoted to coffee, Buenos Aires, cacao, and the Turtle Islands. The book is not only readable by itself, but should become a handy textbook for classes interested in this topic. The preface calls especial attention to the work of the Pan American Union in its effort to increase the study and knowledge about the countries of Latin America.

Handbook for San Francisco. The Chamber of Commerce Handbook. Historical and descriptive. A guide for visitors. Written and compiled by Frank Morton Todd. San Francisco, 1914. Published by the Chamber of Commerce. Copiously illustrated, and with a map of the city. 345 pages.

In anticipation of the Panama-Pacific Exposition the Chamber of Commerce of San Francisco has authorized this publication, and certainly it gives very complete information not alone of the city itself, but also of the history of the State of California and of many interesting facts relating thereto. It seems hardly possible that a better guide to the city for both strangers and residents alike can be prepared.

O'Higgins of Chile. A brief sketch of his life and times. By John J. Mchegan. With illustrations. London: J. & J. Bennett (Ltd.). 12°. 243 pages.

A good and interesting biography of O'Higgins, one of the great heroes of Chile's war of independence. A commendable feature of the book is the proper praise given to the father of the hero, a man who himself did much for his adopted country when it was still a Province of Spain. To read the deeds of O'Higgins and his accomplishments, into which the author has tactfully woven an outline of the history of Chile's struggle, is to gain a better acquaintance with that splendid epoch in South America. As this is almost the only source in English in which O'Higgins's life is accessible in detail, the author deserves credit for his work.

Reminiscences of Diplomatic Life. By Lady Macdonell. Adam & Charles Black. London, 1913. 12°. 292 pages, with 19 illustrations. Price, \$3.

The interest in such a book of experiences lies in the fact that Lady Macdonell was born in Buenos Aires and married there, later accompanying her husband to Spain in his diplomatic mission, and seeing also Lisbon and Rio de Janeiro in the same way. Many delightful paragraphs, therefore, are written on life in these three Latin capitals, and an insight is given into habits and customs of earlier times which would be otherwise difficult to obtain.

Deutsche Arbeit in Chile. That the Germans have been persistently active in Chile finds an added illustration in this publication, in two volumes, issued by the Deutscher Wissenschaftlicher Verein (German Scientific Society) of Santiago, in celebration of the Chile centennial. The context consists of a series of essays by recognized authorities on such activities in which Germans have taken part, as the development of the army, of the church, in the merchant marine, in education, and numerous other fields.

Guatemala, seine Reichtümer, Entwicklung, seine Fortschritte (The Resources, Development, and Progress of Guatemala) is an article prepared with the encouragement of President Estrada Cabrera about that Republic.

Argentien einst und jetzt (Argentina, Past and Present). This is a pamphlet issued by a German colonization society which has secured an area of land south of Bahia Blanca and plans to attract settlers from Germany on it. There are given data about the country and its possibilities for homes of interest to all, but particularly to the emigrant.

Bolivia und seine wirtschaftliche Bedeutung (Bolivia and Its Economic Significance). By Arthur Posnansky. A pamphlet, well illustrated, of 20 pages, reprinted

from "Süd- und Mittel-Amerika," in Berlin, 1913. The author is secretary of the La Paz Geographical Society, and as such speaks with personal knowledge of his home in America. His presentation of the subject is full of enthusiasm and he predicts a progressive future for Bolivia.

Bolivien in Wort und Bild (Bolivia, Described and Illustrated). By Max Josef von Vacano and Hans Maltis. Second edition, with 132 illustrations and a map. 227 pages. 8°. Berlin, 1911. Dietrich Reimer.

The interest in Bolivia is increasing constantly, and a sufficient proof of this can be found in the demand for a second edition of this German book. The authors know their Bolivia from personal experience, and speak with that exactness and scientific observation which go so far to make of permanent value the data herein presented. Their subject is divided into two parts, the first treating of the history, the second of the present aspects of Bolivia. In the second part they describe the forests; the Tropics, especially of the Madeira and Mamore regions; then the Departments of La Paz, Oruro, Potosi, Cochabamba, Chuquisaca, Tarija, Santa Cruz, and the Gran Chaco. A glance is attempted at the future of the country. Considerable attention is given to a study of the native Indians, and many anecdotes of their present life are recorded. The book will be useful as a source of substantial information on Bolivia.

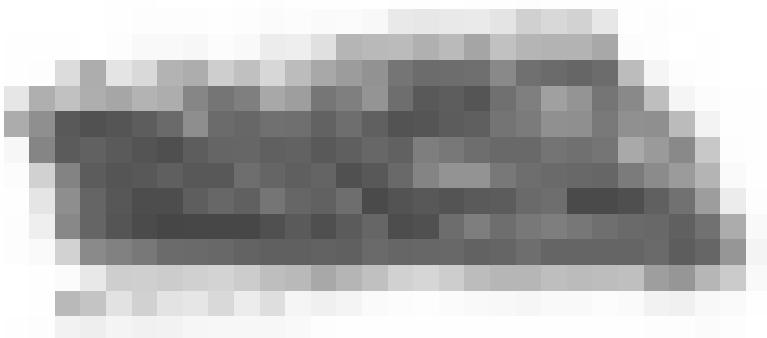
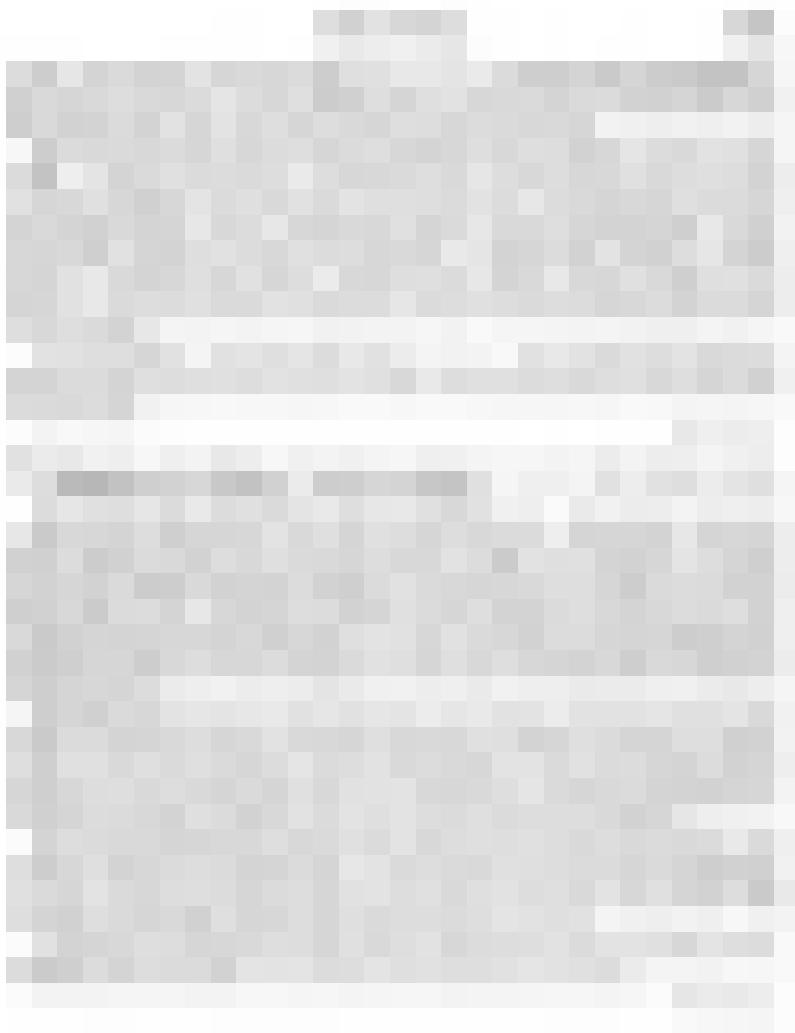
Vom Urwald zu den Gletschern der Kordillere (From the Forests to the Glaciers of the Cordillera). Two expeditions for study in Bolivia. By Dr. Theodor Herzog, Zurich. With 10 copper plates, 3 maps, and 88 illustrations from original photographs by the author. Stecker & Schröder. Stuttgart, 1913. 270 pages. Price, 11 marks (\$2.75).

Dr. Herzog, a professor of botany in the technical high school in Zurich, had made in 1906 one trip through the tropical part of lower Bolivia and into the highlands of that Republic, but these studies begun at that time he continued from September, 1910, to January, 1912, and so impressed was he by the resources of the country that, in addition to his more technical reports, he contributes this book to the intimate knowledge of this interior region of South America. There are 10 chapters describing his trip from Buenos Aires up the river (Paraguay) to the Bolivian boundary, thence to Santa Cruz, his stay in that neighborhood for some weeks, his experiences with the Indians on the Pilcomayo River, his ascent to the plateau at Cochabamba, and his investigations between that city and La Paz. Much of the book is new material of highest interest to student and traveler alike, and all of it is of decided value, for it is characterized by that thoroughness so essentially German. Publications of this class in the library of the Pan American Union help to make Bolivia understood and appreciated, and it is therefore a welcome addition to the shelves.

America As I Saw It, or America Revisited. By Mrs. Alec-Tweedie. New York: The Macmillan Co. 1913. 475 pages. Price, \$3.

This is the author's fourteenth book, and, like a number of its predecessors, will doubtless have a large sale. It is a book that Americans should read, for it tells them of faults as well as virtues. Certain branches of society may be offended at the author's frank remarks; certain religious denominations will censure her deductions; but the broad-minded individual will read the book from cover to cover and derive much benefit and enlightenment. We Americans are prone to think of ourselves from our own standpoint; but a careful perusal of this book reveals faults as seen by a close observer from over the sea, yet the full credit given our institutions and our people counteract in a way the other shortcomings.

The author has visited the United States a number of times and traveled from one end of the country to the other; in social Washington, "noisy New York," windy Kansas City, or balmy New Orleans, she was entertained in the most representative



SUBJECT MATTER OF CONSULAR REPORTS

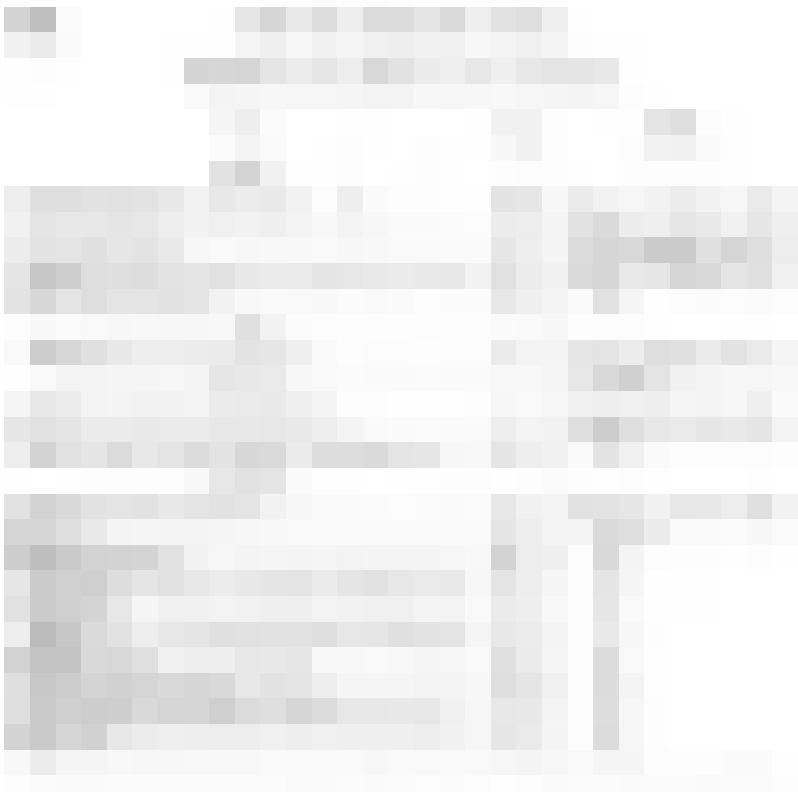
REPORTS RECEIVED TO MARCH 26, 1914.¹

Title.	Date.	Author.
ARGENTINA.		
Argentine exports for 1912 (clipping from "Standard" of Jan. 23, 1914).	1914. Jan. 23	R. M. Bartleman, consul general, Buenos Aires.
"Boletin Mensual de Estadistica Agricola".	Jan. 24	Do.
Publication, "Direccion general de Agricultura y Defensa Agricola."	Jan. 27	Do.
Wool shipments from the River Plate.	Jan. 29	Do.
Foreign commerce of Argentina for calendar year 1913 (clipping from "La Nacion" of Jan. 31, 1914).	Jan. 31	Do.
Caustic soda and chloride of lime.	Feb. 4	William Dawson, Jr., consul, Rosario.
Petroleum products.	do.	Do.
Condensed and evaporated milk.	Feb. 6	Do.
BRAZIL.		
Pianos and piano players.	Feb. 2	Albro L. Burnell, vice consul general in charge, Rio de Janeiro.
Opportunities for settlers in Brazil.	Feb. 3	Do.
Bone ash.	do.	Do.
Tubing for metal beds.	Feb. 4	Do.
Patented filter.	do.	Do.
Cottonseed salad oil.	do.	Do.
Onyx.	do.	Do.
CHILE.		
Proprietary medicines.	Jan. 24	Alfred A. Winslow, consul, Valparaiso.
Chocolate, cacao, candies, and confectionery.	Feb. 11	Percival Gassett, consul, Iquique.
Vehicles.	Feb. —	Do.
Watches and clocks.	Feb. —	Do.
COLOMBIA.		
Sinu River to be canalized.	Feb. 9	Isaac A. Manning, consul Barranquilla.
Gasoline launches for Colombian ports.	Feb. 10	Do.
Colonization of the Caqueta and Putumayo country.	Feb. 13	Do.
Railway projects.	do	Do.
Launches for the Arauca and Meta Rivers.	do	Do.
CUBA.		
Report on new docks of Habana harbor and photograph.	Feb. 14	James L. Rodgers, consul general, Habana.
Graphite for lubricating purposes (little imported).	Feb. 23	Dean R. Wood, consular agent Nuevitas.
Meat-chopping machines—List of hardware dealers.	do....	Do.
DOMINICAN REPUBLIC.		
Soda-water-manufacturing machinery—Duty—Duty on fruit extracts and flavors.	Feb. 1	Charles H. Albrecht, vice and deputy consul general, Santo Domingo.
American magazines—List of booksellers.	Feb. 4	Do.
Duty on catalogues and printed circulars for free distribution.	do....	Do.
Coal (little market)—Amount consumed in 1912—Principal consumers.	Feb. 5	Do.
Collapsible drinking cups (no market).	do....	Do.
Hardware dealers in consular district.	Feb. 6	Do.
Importers and manufacturers of shoes; tanners and exporters of hides (lists).	Feb. 7	Do.
Construction work.	do....	Do.
Electric and hand-power suction sweepers (little market)—Duty.	Feb. 9	Do.
Construction machinery for grinding and crushing (no market).	Feb. 10	Do.
Automobiles.	Feb. 12	Do.
Coal (no market).	Feb. 13	Do.
Electric coffee mills (no market).	Feb. 17	Do.

¹ This does not represent a complete list of the reports made by the consular officers in Latin America, but merely those that are supplied to the Pan American Union as likely to be of service to this organization.

Reports received to March 26, 1914—Continued.

Title.	Date.	Author.
DOMINICAN REPUBLIC—continued.		
Market for canned salmon and flour—List of importers.....	1914. Feb. 17	Charles H. Albrecht, vice and deputy consul general, Santo Domingo.
Limited sale of agricultural machinery—List of sugar estates, coffee and cacao plantations.	Feb. 18	Do.
Antique mahogany furniture (very little).	do.	Frank Anderson Henry, con- sul, Puerto Plata.
Electric development.....	do.	Charles H. Albrecht, vice and deputy consul general, Santo Domingo.
List of schools in consular district—Books for the study of Eng- lish.	Feb. 19	Charles H. Albrecht, vice and deputy consul general, Santo Domingo.
Irons (little market).....	Feb. 20	Do.
ECUADOR.		
Ivory nut.....	Feb. 4	Frederic W. Goding, consul general, Guayaquil.
Cloth manufacture.....	Feb. 10	Do.
Ecuador coal imports during 1912 and 1913.....	Feb. 14	Do.
GUATEMALA.		
Invoices.....	Feb. 28	William Owen, vice and deputy consul general, Guate- mala.
HONDURAS.		
List of officers of Honduras railways.....	Feb. 7	David J. D. Myers, consul, Puerto Cortes.
Automobiles (none).....	Feb. 10	B. D. Guilbert, vice and dep- uty consul, Tegucigalpa.
Agricultural tools.....	do.	Do.
Canned and mild-cured salmon (little market).....	do.	Do.
Pianos.....	Feb. 12	Do.
Nuts (for machines)—List of firms for agency proposition.	Feb. 20	Do.
Cotton oil brands—List of firms selling cotton oil.....	do.	Do.
Agricultural machinery—List of dealers.....	do.	Do.
List of general commission merchants.....	do.	Do.
List of firms handling hardware—No automobile jobbers.....	do.	Do.
Tariff notes—Salesmen's samples.....	Feb. 25	David J. D. Myers, consul, Puerto Cortes.
Structural timber (treated or untreated).....	Feb. 28	Do.
Men's clothing (little market) - List of firms.....	do.	Do.
Electric supplies (little market).....	do.	Do.
Steel mesh and laths for reinforced concrete (not used)	do.	Do.
MEXICO.		
Shippers of salted hides, ixtle, and bones.....	Feb. 6	Clarence A. Miller, consul, Tampico.
List of houses dealing in shoe-store supplies and wholesale shoe houses.....	Feb. 9	Wilbert L. Bonney, consul, San Luis Potosí.
Shoe trade—Rubber goods.....	Feb. 10	Richard M. Stadden, vice con- sul, Mazatlán.
Well-drilling machinery and tools (no market).....	Feb. 12	Clement S. Edwards, consul, Acapulco.
Agricultural machinery (no market).....	do.	Do.
Automobiles.....	Feb. 13	Marion Letcher, consul, Chi- huahua.
Shoe trade.....	do.	Warren W. Rich, vice consul, Salina Cruz.
Sad irons.....	do.	Do.
Names and addresses of stockmen in Tampico.....	do.	Clarence A. Miller, consul, Tampico.
Importation of coal in 1912, and 9 months of 1913.....	do.	Do.
Veneers (no market).....	do.	Clement S. Edwards, consul, Acapulco.
Automobiles.....	Feb. 16	Wilbert L. Bonney, consul, San Luis Potosí.
English instruction books—List of private schools in San Luis Potosí.	do.	Do.
Insulating material marketed under name of "vulcanized fiber" (no possible market).	Feb. 19	Marion Letcher, consul, Chi- huahua.
Supplement to annual report for 1913, Mazatlán.....	Feb. 20	William E. Alger, consul, Mazatlán.
Annual report on commerce and industry, 1913.....	Feb. 23	Jesse H. Johnson, consul, Mat- amoros.
Hardware dealers.....	Feb. 28	Philip C. Hanna, consul gen- eral, Monterey.
Dealers in shoes and supplies, polishes, etc.....	do.	Do.
Inks—List of printing companies.....	do.	Do.



ARGENTINE REPUBLIC

Argentina imported 5,112 AUTOMOBILES during 1913, as against 4,281 for the previous year; the United States furnished 708 machines during 1912 and 1,296 for 1913. France sold more than any other country, heading the list in 1912 with 1,651 and in 1913 with 1,830 machines; England was second and Italy third in automobile sales for the years mentioned.—SUGAR OUTPUT in the Province of Tucuman for 1913 amounted to 221,004 tons, which were produced from 2,606,566 tons of sugar cane.—In 1913, 2,699 SHEEP were imported into Argentina for breeding purposes; this was a large increase over the annual imports for many years. Among the breeds were Lincolns, Hampshires, Oxfords, Shropshires, Romney Marshes, etc., and they came principally from Great Britain.—The South American Journal (London) of February 28, 1914, contains an interesting résumé of BRITISH INTERESTS in Latin America, which in amount reach the enormous figures of nearly \$5,000,000,000, the average return being something like 5 per cent on invested capital. As to railways, the bulk of English capital is invested in Argentina, where over a billion dollars produce a return of between 4 and 5 per cent to the bondholders.—Dr. Edward E. Brandon states that the National Government has ceded to the University of Buenos Aires lands for the erection of a new building for the department of exact sciences of the SCHOOL OF ENGINEERING.—The EXCHANGE OF PROFESSORS between the University of Buenos Aires and of Paris becomes effective January 1, 1915. The University of Buenos Aires will pay the traveling expenses of the French professors and allow them 2,000 pesos (\$860) a month while in actual service. Not more than two Argentine professors will be sent from Argentina in any one year.—The department of LAW of the University of Buenos Aires proposes to give a four-year course for the practitioner, requiring two years' additional work for the degree of doctor of jurisprudence. The University of La Plata adopted this course from the beginning. The object is to make legal studies more practical, and to reserve the advanced studies in jurisprudence to special students.—A tank vessel for PETROLEUM is being constructed for the Argentine Government to be used in transporting oil from the Comodoro Rivadavia oil fields to Buenos Aires. It is expected that this vessel will be ready for service in May next. The petroleum will be conveyed in barrels and will be stored at Buenos Aires in two tanks of a capacity of 6,000 cubic meters each. At Comodoro Rivadavia there are four tanks of a capacity of 6,000 cubic meters each, all of which are expected to be full of oil by May. The production of

the Rivadavia petroleum fields is from 500 to 900 cubic meters per week. A new well is producing daily about 30 tons of oil.—The exports of frozen and chilled MEATS from the Argentine Republic during the year 1913 amounted to 2,515,859 carcasses of frozen wethers, 1,527,666 quarters of frozen beeves, and 3,006,608 quarters of chilled beeves, as compared with 3,584,927 carcasses of frozen wethers, 2,086,780 frozen quarters of beeves, and 2,269,474 quarters of chilled beeves in 1912.—A recent executive decree authorizes the department of agriculture of the Argentine Government to expend 80,000 pesos (\$34,400) in participating in the international exposition of HYGIENE, which will take place at Genoa, Italy, during the present year.—HONEY is consumed in the Argentine Republic in considerable quantities. In 1912 the imports of this product amounted to 151,094 kilos, valued at 22,664 Argentine gold pesos (gold peso equals \$0.96). During the first nine months of 1913 the imports of honey consisted of 94,343 kilos, valued at 14,151 Argentine gold pesos. The imports of wax in 1912 amounted to 38,463 kilos, valued at 14,859 Argentine gold pesos. Bees thrive over large areas of Argentina, and the annual production of honey per hive varies from 50 to 60 kilos and in some cases as much as 80 kilos. This is a branch of industry that could be profitably developed in the Republic in connection with fruit growing and farming.



A law of January 7, 1914, authorized the executive power to regulate the purchase and sale of TOBACCO and the manufacture of cigars and cigarettes in Bolivia. The prices at which domestic tobacco may be bought are not to be less in 1914 than those prevailing in 1913, and prices thereafter are to be fixed each year. The Government may import foreign tobacco or cigars and cigarettes, but if the Government leases the tobacco monopoly to private persons, then the imported tobacco is subject to the duties prescribed by the laws in force at the time the importation is made. The law referred to provides that cigar and cigarette factories in operation in the Republic, together with stock on hand, at the time of passage of the law, shall become the property of the State upon payment therefor of the appraised values to be determined in accordance with the provisions of the law. Under this law the Government has arranged with Villa, Mauri & Co., of Sucre, to take over the tobacco business in Bolivia, including the manufacture and sale of cigars and cigarettes, for a period of 20 years. The capital of the company referred to is

2,500,000 bolivianos (\$1,000,000).—“El Norte,” a daily paper of La Paz, Bolivia, states that the FUR and skin industry in Bolivia is capable of being developed into one of the principal industries of the country, inasmuch as the forests of the Andean slopes of eastern Bolivia contain wild fur-producing animals, among which are fine specimens of tiger and herds of vicuna.—A law of January 24, 1914, requires all BANKS operating in the Republic to keep on hand in gold coin at least 5 per cent of the total amount of their deposits. After March 1, 1914, all foreign banks and branches of foreign banks doing business in Bolivia are required to have a capital of not less than 625,000 bolivianos (\$250,000).—A recent executive decree requires the payment of CUSTOMS DUTIES in all the custom-houses of the Republic in gold coin or in notes of the Bank of the Nation. The Bank of the Nation is required to receive the bank notes of the National, Argandona, and Mercantile Banks, but is not required to exchange them for gold coin.—A law promulgated on January 7, 1914, authorizes the President of the Republic to establish a STATE MONOPOLY of all foreign products distilled from fruits and cereals, as well as of aperients and liquors in general. The Government may appropriate the stock of such liquors as are on hand in the Republic at the time of the establishment of the Government monopoly, paying for them the market prices ruling six months beforehand. The Executive is authorized to lease the liquor monopoly to the highest bidder, or to operate it for the State or in conjunction with private parties. The President is also empowered to place a surcharge tax of 50 per cent on liquors imported into the country from the time of the promulgation of the present law to the date of the establishment of the Government monopoly.—The BANK of the Nation has been authorized to increase its capital to 50,000,000 bolivianos (\$20,000,000). Gold coin must be kept on hand to the amount of 40 per cent of the bank's notes in circulation. The net earnings of this bank in 1913 were 726,026 bolivianos (\$290,410).—A law promulgated on January 10, 1914, authorizes the Chief Executive to issue State BONDS to the value of 10,000,000 bolivianos (\$4,000,000), the proceeds of which are to be used in canceling the credits in favor of the Bank of the Nation, National, Argandona, and Mercantile Banks. These bonds are to bear 8 per cent annual interest and 1 per cent is provided for an accumulative amortization fund. The amortization fund and the payment of the interest are to come from an annual appropriation in the general budget of 900,000 bolivianos (\$360,000). The bonds will be issued in denominations of 500 and 1,000 bolivianos (\$200 and \$400).—A rebate of 25 per cent on ordinary freight tariffs charged on the Arica-La Paz Railway has been granted on coal, hides, and hay until June 30 next, after which date a readjustment of rates will be made, which will doubtless be

more favorable for such commodities. The reduction on coal rates will be especially beneficial for Bolivian cities, where the price of this fuel is enormous, caused mainly by the high rates of transportation.—A movement is on foot to join the ARICA-LA PAZ Railway with the electric line running from the Alto to La Paz, which would permit loaded cars from the steamship wharf at Arica to be unloaded at the customhouse in the city of La Paz. Such an arrangement would mean quicker transportation and the saving of the labor of transferring freight at the Alto de La Paz.



The FOREIGN COMMERCE of Brazil in 1913 amounted, in round numbers, to 1,976,600 contos (\$640,418,400), consisting of imports 1,007,600 contos (\$326,462,400), and exports 969,000 contos (\$313,956,000). The imports in 1913 exceeded those of 1912 by 55,000 contos (\$17,820,000), while the exports in 1913 were 150,000 contos (\$48,600,000) less than those of 1912. The exports of coffee in 1913 amounted to 13,267,000 sacks, or 1,187,000 sacks more than in 1912. The value of the coffee exported in 1913 was, however, 86,701 contos (\$28,091,124) less than in 1912. The rubber exported in 1913 amounted to 35,861,000 kilos or 6,424,000 kilos less than in 1912. The value of the rubber exports in 1913 was 153,560 contos (\$49,753,440) or 87,864 contos (\$28,467,936) less than the value of the rubber exported in 1912. The exports of cotton in 1913 were valued at 34,615 contos (\$11,215,260) or 19,054 contos (\$6,173,496) more than in 1912. The exports of hides in 1913 amounted to 32,905 contos (\$10,661,220), or 2,723 contos (\$882,252) more than in 1912. The exports of tobacco in 1913 rose to 24,569 contos (\$7,960,356), or 3,054 contos (\$989,496) more than in 1912. The exports of yerba mate or Paraguayan tea in 1913 amounted to 35,222 contos (\$11,411,928), or 3,683 contos (\$1,193,292) more than in 1912. The exports of cacao in 1913 amounted to 23,904 contos (\$7,744,896), or 938 contos (\$303,912) more than in 1912.—In the States of Rio Grande do Sul, Santa Catharina, Parana, and Sao Paulo GRAZING LANDS may be purchased at from \$2 to \$50 per acre, the price varying with the location and quality of the land. In Matto Grosso, Goyaz, and Minas Geraes the price of ordinary range land is about 30 cents per acre. For two years or more the price of cattle has been increasing, and the number in Brazil does not supply the local demand. Recent advances of about \$3 per head have been recorded. Experts say that ranches can be stocked

with cows at the rate of about \$23 per head; this fact, together with constantly improving transportation facilities, offer many possibilities worthy of consideration by stock men.—Foreign banks in Brazil usually start their EUROPEAN CLERKS on \$100 per month, and as there are no bonding companies the clerks must deposit at least \$1,000 with the bank. Contracts between the clerk and the bank are generally made for three or five years, and the bank pays the steamship fare from Europe to Brazil.—“Linking up South America” is the title under which the Montevideo Times (Feb. 8), of Uruguay, tells of the progress in RAILWAY CONSTRUCTION which brings southern Brazil, Paraguay, Uruguay, and north Argentina into closer communication than ever before. The Central Railway of Uruguay has found it necessary to purchase 12 additional locomotives to handle the traffic, 6 of them being of the fast passenger type.—Press reports state that the Sao Paulo electric company is arranging to negotiate a long-time loan of 2,000 contos (\$648,000) at 95 per cent and 5 per cent annual interest.—A strong syndicate is negotiating for the purchase of the rich Gaulaxo Taveira IRON MINES in the municipality of Marianna, State of Minas Geraes.—In December, 1913, IMMIGRANTS to the number of 5,470 landed at Brazilian ports.—The Demographic Bulletin estimates the POPULATION of the city of Rio de Janeiro at the beginning of 1914 at 984,570 inhabitants. In December, 1913, there were 1,703 deaths, 2,170 births, and 595 marriages in the city of Rio de Janeiro.—A recent law of the Brazilian Congress fixes the BUDGET of expenses of the Republic of Brazil at 435,773 contos, paper (\$97,613,452) and 95,469 contos, gold (\$52,126,074).—The Revista Commercial e Financeira of Rio de Janeiro is authority for the statement that the State of Sao Paulo is negotiating with the house of Antunes dos Santos & Co. for bringing into that State 150,000 agricultural immigrants.



The BUDGET of expenses of the Government of Chile for 1914 amounts to 252,568,172 pesos, currency (\$53,039,316), and 121,768,599 pesos, gold (\$44,445,535), or the equivalent in United States currency of \$97,484,851. Among other items of expenditure the one for the department of finance amounts to \$25,835,087, American gold; for railways, \$17,215,053; for public instruction, \$8,301,975, and for public works, \$5,407,944.—The CUSTOMS RECEIPTS of the Government of Chile for January, 1914, amounted to 12,735,240

gold pesos (\$4,648,362) and 163,502 paper pesos (\$34,335), or the equivalent in American currency of \$4,682,697.—Since the opening of the Arica to La Paz RAILWAY to public service early in 1913, a regular freight and passenger schedule has been maintained between Arica and La Paz on a 20-hour schedule. The traffic has constantly increased and sleeping and dining cars are employed in the passenger service. It is the intention of the management to operate in the near future trains from Arica to La Paz on an 18-hour schedule.—For some time past the Government of Chile has made careful investigations of the PETROLEUM deposits discovered in the Republic, and particularly in the southern part of the country. The section of geography and mines of the department of public works has made extensive investigations in southern Chile, and has, by borings, discovered the existence of petroleum in a number of places. Recently the Chilean Government appointed a Chilean engineer, Francisco del Campo, to study the petroleum deposits of the Territory of Magallanes. Señor del Campo reports that he has made examinations in Chilean Patagonia as far as the Gallegos River, and has found numerous formations indicating the presence of petroleum in that section of the country, and indisputable evidence was obtained of the existence of petroleum in the Territory of Magallanes. Two Chilean companies—the South American and the Patagonia—are now boring for petroleum in the territory.—A law has been enacted authorizing the President of the Republic to auction, within the next two years, NITRATE LANDS in the Province of Tarapacá known as the Condor, Aurrera, Sebastapool, Santa Lucía, and Pan de Azúcar properties, as well as the "demasías" (spaces between claims) of the Gloria, San Remigio, Barcelona, and Pazpampo properties. Under the law of February 12, 1912, these lands will be divided into lots and estimate made by the nitrate board of the industrial nitrate available in each lot. Notice of the auction will be published in Chilean, English, German, French, and American papers, and dates and conditions will be specified.—The Peña Blanca COPPER SMELTER at Cabildo, Chile, is working day and night shifts. The copper mines of the surrounding country are in active exploitation, and the smelter is reported to be earning large dividends.—The MINING MAP of the region traversed by the Longitudinal Railway has been completed. This map will be of great assistance to miners and prospectors in locating mines in some of the richest mining sections of the Republic.—Press reports state that the Government of Chile proposes to contract, during the present year, for the construction of PORT IMPROVEMENTS in Antofagasta amounting to 20,000,000 gold pesos (\$7,300,000). The work is to be done through public bids.—Clark Bros. & Cementerio have established a plant to saw, turn, and polish MARBLE at San

Felipe. Five electric motors of 5 horsepower each are employed to operate six machines used in this work. With the machinery at present in use 240 marble slabs, representing 800 square meters of stone, can be taken from the quarry in 40 hours. It is proposed to pave one of the plazas of Valparaiso with marble slabs from the Andes Mountains. Additional machinery has been ordered abroad and the business will be enlarged. The marble quarry is located at a place called "Cajon del Juncal," and consists of a mountain of marble 500 meters high and of unknown thickness and depth.



On July 20 next an IRON BRIDGE over the Fucha River, near Bogota, named in honor of President Carlos E. Restrepo, will be opened to public traffic.—The National Government has issued a decree establishing a technical commission of engineers to explore and make a preliminary plan of the route to be adopted in the construction of the section of the PACIFIC RAILWAY from Girardot to Palmira, either by way of the lowlands of Calarca through the Hermosas Valley, or via such point as may be deemed most advisable. After the plan of the preliminary survey has been submitted to the department of public works, a final survey will be made over the route selected.—The UNIVERSITY OF CAUCA at Popayan recently opened a shop, fitted up with the necessary modern apparatus and tools, for use in electric and mechanical instruction. This university, which was founded in 1910, has become one of the great educational centers of the country.—A recent executive decree cedes to the municipalities of Tumaco and Barbacoas, in the department of Cauca, the usufruct of the NATIONAL FORESTS on Government lands within their respective jurisdictions for a period of 5 years. These municipalities will appoint forest watchmen for every 10,000 hectares of land, whose duties will be to see that the forests are not destroyed or exploited out of season, and that vegetable ivory be not pulled from the palms but collected after it has ripened and fallen to the ground.—A strong French financial company has offered to LOAN to the municipality of Bogota £2,000,000 (\$10,000,000).—The net profits of the Bank of Colombia, the main office of which is in Bogota, amounted to \$84,864 in the second half of 1913. The stockholders received a dividend of \$3 a share, and \$2,000 was voted to charity.—At the beginning of February, 1914, the MUTUAL COMPANY of Colombia domiciled in Cartagena, established a branch bank with a capital of \$100,000 in Bucaramanga, capital of the de-

partment of Santander.—The President has approved a contract made by the minister of public works with Pearson & Son, of London, for construction work at the port of CARTAGENA.—The National HYDROPLANE Company has been organized in Medellin with a capital of \$300,000, represented by 30,000 shares of \$10 each.—Stockholders of the BANK of Colombia have elected Ernesto Michelsen, Gabriel Camacho, and Antonio Jose Cadavid first, second, and third managers, respectively, of that institution.—The interior department, through the department of foreign relations, has requested the consuls of Colombia in Paris, London, Berlin, and New York to send such books, papers, and magazines on hygiene as may be obtainable in said cities, for the purpose of founding a LIBRARY for the use of the supreme board of health in the capital of the Republic.—The National Congress has made March 25 a public HOLIDAY in commemoration of the first centenary of the sacrifice of Ricaurte, and ordered the appointment of a committee to arrange for the celebration.—The official opening of the Antioquia RAILWAY at Medellin will take place on July 20, 1914, at which time the Northern Station in that city will be opened to the public.—Generally speaking the COMMERCIAL YEAR of 1913 was a very prosperous one in nearly every branch of trade of the consular district of Cartagena, and especially pronounced in foreign trade. The banks, one of the great trade barometers, report a favorable volume of business and a bright outlook for 1914. Industrial developments are being gradually extended by the erection of factories for the production of staple articles; wages for labor have advanced from 40 cents gold per day to as high as 60 cents gold for agricultural labor and 90 cents for cargo handling. The annual production of 1,100,000 bags of coffee is a great industry, and when only a very small portion of available land is under cultivation, the possibilities for still larger production appear to be almost limitless. The customs duties collected during 1913 amounted to \$3,133,438, or a gain of 28 per cent over the duties of the previous year, considering only imports. The declared exports to the United States from the Cartagena district amounted to \$4,404,-134.65, against \$4,250,803.53 in 1912.



Mirks & Dohls, a North American firm, has recently engaged in the exploitation of the fresh FISH INDUSTRY in Costa Rica, and has commenced operations by the investment of an initial capital of \$30,000. These gentlemen have contracted with the Costa Rican

Railway for the use of tank cars in which to transport live fish from Limon to San Jose, the capital of the Republic, at prices somewhat lower than the regular tariff rates. These tank cars of a special design will be purchased abroad and will be imported free of duty. The firm calculates that it can sell fresh fish in San Jose at a profit at 20 centimes (\$0.093) a pound, which is much less than the price of other meat. The fish industry in Costa Rica is practically undeveloped. The greatest activity in this industry will be, for the present, on the Atlantic coast, but arrangements have been made to exploit it on a smaller scale on the Pacific coast. The business is a promising one, and there is every reason to believe that within a short time edible fresh fish will be sold currently in the principal markets of the country at prices much less than those which now obtain.—PETROLEUM deposits have been discovered in Costa Rica in the San Pablo de Puriscal Mountains. An analysis of samples from a number of these deposits gave most excellent results. Foreign capitalists have submitted a proposal to the owner of the land offering him a considerable sum for the territory on which these deposits are located and the right to exploit the same. The offer was refused, but it is understood that further negotiations are to be carried on regarding the exploitation of the property.—The Pacific Railway Co. has established a direct daily TRAIN SERVICE between San Jose and Alajuela, the train leaving San Jose at 7 o'clock a. m. and returning at 6 p. m.—The city of Limon has sent a committee to Colon, Panama, to investigate the materials used, the system employed, and the results obtained by that city in PAVING its streets, and to report upon the same to the municipal authorities of the city of Limon for their guidance in contracting for the paving of the streets of the latter city.—The machinery ordered from the United States by the Government of Costa Rica for drilling ARTESIAN WELLS in the Province of Guanacaste reached Puntarenas at the close of 1913. This machinery was transported into the interior in January last, has been set up, and it is proposed to commence boring the first well at Coralillo, near the port of Humo. A number of property owners propose to drill wells for their own account in search of artesian water.—According to press reports the municipality of San Jose is considering the placing of a domestic LOAN of 1,000,000 colones (\$465,000), the proceeds of which are to be used in consolidating the municipal debt.—The board of public health of San Jose has ordered WATER MAINS abroad in which to convey water for supplying the municipality. One of the plans for bettering the water supply of the city is to bring water from the Tiribi River through new pipes. This would cost, approximately, 100,000 colones (\$46,500). A plan for filtering the water is also being considered.—The BUDGET of the municipality of Puntarenas for 1914 is

estimated as follows: Receipts, 307,805 colones (\$143,129), and expenditures, 259,890 colones (\$94,860), leaving an excess of receipts over expenditures of 47,915 colones (\$22,280).—Declared EXPORTS to the United States from Costa Rica during 1912 and 1913 were as follows: San Jose, 1912, \$3.75; 1913, \$1,485; Port Limon, 1912, \$5,826,170; 1913, \$6,430,185; Puntarenas, 1912, \$380,327; 1913, \$323,168. Bananas, coffee, gold, silver, timber, hides, and rubber make up the larger amounts of exported products, while \$1,000 worth of photographs are mentioned as coming from San Jose.



CUBA

A recent decree of the President of Cuba establishes a precedent for the PROTECTION OF FOREIGN TRADE-MARKS in the Republic. According to the patent and trade-mark laws of Cuba, trade-marks have hitherto been registered in the name of the first applicant, regardless of whether said applicant was the legitimate owner or not. Under the decree of President Menocal the trade-mark law is modified so that foreign trade-marks registered in the Republic belong to their legitimate owners and not to the person who first makes application for registration unless that person is rightfully entitled to the same.—An agricultural and STOCK FAIR will be held at the "Quinta" of the Mills in the city of Habana, Cuba, from April 11 to May 2 of the present year. The sum of \$100,000 has been offered in prizes for animals for breeding purposes, such as horses, asses, cattle, and hogs. The judges will consider no animal entitled to a prize which does not score at least 75 points, the object of the administration being to purchase the best exhibits that may be offered for sale and to use them in improving the live stock of the nation at the different Government agricultural stations. In the group comprising horses and asses a first prize of \$1,000, a second prize of \$500, a third prize of \$200, and two fourth-class prizes of \$100 each are offered for stallions. Prizes ranging from \$400 to \$50 are offered for trotting mares, from \$750 to \$50 for pacing mares, and from \$100 to \$25 for pony mares. In the group comprising cattle the prizes run from \$100 to \$25, in the sheep group from \$75 to \$10, and in the hog group from \$100 to \$5. Persons, either at home or abroad, who desire to enter animals for exhibition, should communicate with the secretary of agriculture, zootecnic department, Habana, Cuba, specifying the class of animal and breed.—At the request of President Menocal, the United States Government has designated Lieut. C. S. Parker to act as instructor for the Cuban NAVY. The new instructor speaks Spanish and expects to remain at his post about two years.—The committee appointed for the purpose of selecting a site for the proposed million-

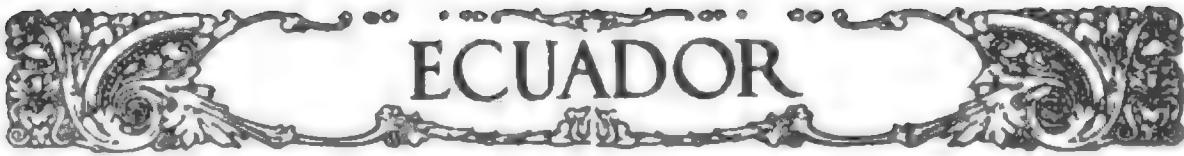
dollar CUBAN CAPITOL has chosen the grounds now occupied by Government hospital No. 1 in the city of Habana on University Heights. The hospital grounds cover an area of 134,000 square meters, and the location is the highest in the city. Should the site be approved by Congress and the capitol erected thereon, the building could be seen from every part of the city and from the water front. The plan includes the opening of a wide avenue connecting the site with Vedado. The hospital buildings are frame and are quite old and out of repair.—The Habana Electric Light & Power Co. has obtained the contract for the PAVING of the city of Habana with concrete blocks, charging therefor \$5.23 per meter. The company offers to finish the work within 700 days.—The HABANA DRY DOCK officials recently gave an exhibition, to which were invited newspaper men and the general public, for the purpose of demonstrating how a ship may enter and leave the dock. The ease and quickness with which the operation is carried out was a revelation to many of the sightseers. It is believed that when the Panama Canal is in operation numerous passing ships will make use of the dock.—Habana is to have FIVE NEW SCHOOLS, the secretary of public instruction, Dr. Ensenat, having granted the necessary authority to the board of education, which will shortly designate the location of each school.—A corporation formed at Atlanta, Ga., has acquired 33,000 acres of land along the Salado River in the vicinity of Guamo, Cuba, and will RAISE CATTLE on a large scale. The company is capitalized at \$1,000,000, and proposes to begin operations with 25,000 head of cattle, and to market at least 6,000 a year in the United States. Mr. James L. Hunter, of Atlanta, will have active charge of the business in Cuba, and the name of the concern is the Oriente Cattle Co.—One thousand seven hundred and eighty crates of CITRUS FRUITS and vegetables were shipped from the Isle of Pines during the last week in February, 1,000 of which were vegetables.

The bulletin hastens to correct a statement in the March number implying the death of Dr. Carlos J. Finlay, the noted Cuban physician. Dr. Findlay, in whose honor a statue is to be erected, is still alive, though retired from active medical work.

DOMINICAN REPUBLIC

On January 22, 1914, the President of the Dominican Republic delivered a MESSAGE to the National Congress calling the attention of that body to the fact that, according to custom and precedent, special sessions of Congress could only treat of such matters as they had been called together to consider. In this message the Executive quotes from article 32 of the constitution, which states that Congress

shall meet in regular session on February 27 of each year and shall remain in session 90 days, which term may be extended for a period of 60 days, and adds that Congress may be convoked in extra session by the executive power. On December 18, 1913, the President had called an extra session of Congress to meet in January of the following year for the purpose of considering matters of great interest to the Nation.—The Government of the Dominican Republic has taken steps to place a STONE, commemorative of the discovery of the New World and in honor of its great discoverer, in the Convent of Santa María de la Rábida in Spain. The Onubense Columbian Society at Huelva, Spain, has written a letter thanking the President of the Dominican Republic for the earnest manner in which he has cooperated in this matter.—Dr. Francisco J. Peynado, minister of the Dominican Republic in Washington, has, on behalf of his Government, contracted with J. A. Collet to take charge of the general bureau of public works of the Dominican Government for a period of two years under the orders of the department of fomento and communications.—When the branch of the Samana & Santiago RAILWAY is completed, connecting by rail the town of Salcedo with that of Moca, railway communication will have been established between Puerto Plata and Sanchez, a distance of 220 kilometers. The journey by rail between these two places can be made in less than 24 hours, with stops at Santiago, Moca, Salcedo, La Vega, San Francisco de Macoris, Pimentel, and a number of stations situated in the interior of the Province of Cibao, and the railroad fare, first class, will not exceed \$9. Work was commenced on this branch in January last. The population of the six Provinces through which this branch line will pass is about 370,000, which would give an average population of about 1,681 inhabitants per kilometer of railway. Agriculture is being rapidly developed in this section of the Dominican Republic, and the railway is assured of a large freight traffic immediately after it is completed and opened to public service.—The "Central Romana," an incorporated company operating a large sugar and agricultural plantation in the Dominican Republic, has been granted permission by the Dominican Government to import 500 PORTO RICAN LABORERS to assist in harvesting and working up the sugar-cane crop for 1913-14.—A recent executive decree establishes the office of DELEGATE OF FOMENTO, and communications under the direction of a graduate civil engineer, whose duties will be to assist in inspecting and controlling public works, including telegraph and telephone lines.—Construction work has commenced on a RAILWAY from Barahona to the Haitian frontier, the contractor being E. Hatton, of Barahona, D. R.—The department of public works will build a BOULEVARD along the sea front of Santo Domingo and one leading out from the city; work on the former is about to begin.



ECUADOR

The Government of Ecuador has definitely contracted with a German firm for the construction of the Huigra to Cuenca RAILWAY. According to the terms of the agreement construction work is to commence within two months from February 18, 1914, that is to say, within 60 days from the signing of the contract. The inhabitants of the country through which this railway will pass are greatly elated over the prospects of the early construction of the line, which, after it is built and put in operation, will be a powerful factor in the development of a large area of one of the richest agricultural and stock regions of Ecuador.—A proposal from a Berlin firm of contractors for the building of a RAILWAY from Quito to Esmeraldas has been received by the department of public works of the Government of Ecuador. The construction board of the Quito to Esmeraldas railway has made a favorable report upon the proposal of the German firm, and the matter has been submitted to a committee of experts appointed by the Government for further consideration.—Señor José Cardona, an Ecuadorian AVIATOR, has gone to Costa Rica for the purpose of establishing an aviation school in the capital of that Republic.—Mr. Ellis, an American electric engineer who installed the electric tramway in Caracas, Venezuela, has been engaged to superintend the work of installing the ELECTRIC TRAMWAY in Quito. More than 160 tons of rails and other supplies were recently received in Guayaquil for the use of the Quito tramway. Construction work is being rapidly pushed forward, and the installation and operation of the tramway is to take place in the near future.—The NAVAL BUDGET of the Government of Ecuador for 1914 amounts to 595,570 sucre ([\$290,043]).—A large, well-equipped, modern BREWERY is to be established in the city of Quito by Victor Miño & Co. The machinery and equipment have been ordered from Europe.—The Government of Ecuador has contracted with William Schroeter for the completion of the SEWERING of the Twenty-fourth of May Avenue in Quito.—The consul of Ecuador in Berlin has contracted, on behalf of the Government of Ecuador, with Carlos Rintelen, to act as consulting TECHNICAL EXPERT to the department of public works for a period of four years.—The BUDGETS for the universities of the Republic for 1914 amount to 300,837 sucre ([\$150,418]), as follows: Central University, 133,160 sucre ([\$66,580]); University of Guayas, 97,144 sucre ([\$48,572]); University of Azuay, 62,921 sucre ([\$31,460]); and the University of Loja, 7,612 sucre ([\$3,806]).—No PAPER is manufactured in Ecuador, but large

quantities are annually imported for such purposes as the printing of newspapers, books, etc., for wrapping paper, paper for cigarettes, wall paper, writing paper, etc., for all varieties of which there is a fair demand. It is reasonably certain that the country has many trees that would make excellent pulp for paper manufacture, but these have not been studied with such an end in view. Large quantities of rags and old papers are destroyed annually, there being no demand for them. The trend of the paper trade has been toward the United States, which in 1910 had but 6 per cent of the importation. The following year this had increased to 15 per cent of the total trade, and the present prospects are excellent for still further development.



GUATEMALA

Articles which have recently appeared in the press of Guatemala have strengthened the impression that the country is rich in PETROLEUM deposits which only await proper development in order to establish one of the most important and lucrative industries that has ever been undertaken in the Republic. The department of mines has made investigations concerning the existence of petroleum in paying quantities in Guatemala, and reports that the geologic formation of a number of zones of the Republic strongly indicate the existence of petroleum and gas deposits, but that it is not possible to definitely determine the extent and value of same without making more thorough explorations, and resorting to borings or the sinking of shafts in the districts where these deposits are supposed to exist.—An AGRICULTURAL MUTUAL AID SOCIETY has been organized in Guatemala with the object of obtaining employment for its members and in order to furnish pecuniary aid and medical assistance to sick members and to their families. The society will maintain a life insurance department, but this feature is not obligatory. The main office of the society is at Quezaltenango, with branch offices in the capitals of the departments in the different agricultural sections of the Republic. One of these branches was recently established at Retalhuleu.—Repair work on the Chiquimulilla CANAL near Barberena has been completed, and this waterway was again opened to public traffic in February.—The first AUTOMOBILE from Quezaltenango to Huehuetenango arrived in the latter place on February 8, 1914, having made the trip, without encountering any difficulties, in six hours. The highway is reported to be in excellent condition, and this trial journey proves the feasibil-

ity of establishing rapid automobile communication between the places mentioned.—The ENGLISH HOSPITAL in the city of Guatemala, which was inaugurated on November 21, 1913, by a North American society of the Presbyterian Church, is situated in one of the most salubrious and picturesque parts of the Federal capital. The hospital has a free ward for the indigent sick, and patients of every class, nationality, or religious belief are received for treatment. The institution, which is fitted up in the most modern and scientific manner, is under the direction of Dr. Mary E. Gregg, of the University of Chicago, assisted by Miss York. Patients suffering with contagious diseases are not admitted to the hospital, in as much as the institution is not provided with isolated wards. The pay wards vary in price according to location of room, the maximum charge being \$5 per day. The hospital is open to patients of physicians practising in Guatemala. A school for nurses is maintained in connection with the hospital, the curriculum covering a period of three years.



HAITI

By a law of the National Congress, sanctioned by the President of the Republic on March 1 last, the nation acknowledges the DEBT of the revolution, and the secretary of the treasury is authorized to make an inventory of same, using such means as he may deem expedient. The secretaries of war, interior, and of the treasury are required to submit to Congress a detailed report showing the amount of said debt in order that the legislative power may authorize its payment.—The executive power has issued a decree providing for the opening of a SPECIAL CREDIT of \$460,000 and 10,000 gourdes for the department of war and marine, and \$100,000 and 82,000 gourdes for the department of the interior, so that these departments may have funds for the payment of certain absolutely necessary expenses.—A decree of the department of public instruction of February 24 of the present year provides that candidates seeking the title of DENTAL SURGEON who desire to enroll in the National School of Medicine shall present certificates showing that they have completed the secondary classic studies. To obtain these certificates candidates should apply at the regular examining sessions held in July and October of each year for students of lyceums and colleges and for young men who desire to enter the National School of Law. This decree repeals decree of September 2, 1908, on the same subject.—The secretary of public instruction has addressed an impor-

tant circular to all the school inspectors of the district indicating to them the means they should take to compel the ATTENDANCE OF PULILS.—A new newspaper entitled "Le Patriote" has been established at Port au Prince.—Following the usual custom, the CARNIVAL celebrations in 1914, which always bring to the Federal capital a host of visitors from all parts of the Republic, were commenced on February 22 last.—On March 1 of the present year an interesting contest took place between the FOOTBALL team of the North American cruiser *South Carolina* and a team of the capital of Haiti, the team of the *South Carolina* winning the game. Many of the most prominent persons of Port au Prince were present. The speeches made by the captains of both teams were very cordial and timely.—At Cayes the newspaper entitled "L'Haitien," which was first published in 1902, is again being published.



HONDURAS

The following MINING CONCESSIONS have recently been granted by the Government of Honduras: Not more than 1,000 hectares of land in Angeles Valley, Department of Tegucigalpa, to Montis and Osment, together with water rights in the streams running through the lands covered by the concession; to Maria Felix G. de Galvez and Mateo Martinez, 1,000 hectares of mineral lands at Yucateca, jurisdiction of the village of Lepaterique, Department of Tegucigalpa; and to Leon Peral, of Texas, the right to exploit gold mines and placers on 1,000 hectares of land at Ulacguas, village of El Dulce Nombre, Department of Olancho.—A new THEATER, with a seating capacity for more than 1,000 persons, is being erected in Tegucigalpa.—The PALMAS PLANTATION CO., of Colorado, has been granted 268 hectares of land on the Tela River, Department of Atlantida, to be used for agricultural purposes.—The Government has contracted with Antonio Litricio to transport the MAILED between Roatan, La Ceiba, Puerto Cortez, and Tela, employing a suitable vessel for the purpose.—Permission has been given the New York & Honduras Rosario MINING Co. to import free of duty the machinery and tools necessary for use in the exploitation and development of their mines.—The free NAVIGATION of the Ulua River from Pimineto to Remolino, near the town of Santa Barbara, has been granted to Eduardo F. Campoamor for 15 years.—The preliminary plans of the Trujillo to Juticalpa RAILWAY, showing the extension of the Tegucigalpa branch and the wharf at the Bay of Trujillo, have been approved by the Government.—D. E. Cooper

has contracted with the Government of Honduras to transport the MAILS from and to Puerto Cortez, Tela, La Ceiba, and Utila, using a suitable vessel for the purpose.—The Government of Honduras has contracted with J. Rössner & Co., of Hamburg, to allow them 3 per cent COMMISSION on the wholesale prices of such merchandise as the Government may purchase abroad through them.—The Atlantida BANK, an institution in which New Orleans capitalists are interested, has been authorized to establish branches in the Departments of Olancho and Islas de La Bahia.—The Cuyamel Fruit Co. has a concession for the construction of a RAILWAY from Veracruz (Honduras) to Omoa, and a wharf at Omoa.—Miguel Turcios Reina and Miguel R. Duron, of Tegucigalpa, have submitted to President Bertrand a plan for the construction of an ELECTRIC RAILWAY from the Federal Capital to the port of San Lorenzo on the Gulf of Fonseca. The estimated cost of this line is 2,000,000 pesos (\$868,000), and the petitioners recommend that the road be built administratively by the Government of Honduras and that it be owned and operated by the Government. The plans and the estimate of the cost of construction are based upon investigations and reports made by a Swiss engineer who has had long experience in the construction and operation of electric railways in Switzerland. The country which the proposed railway would traverse is exceedingly rich in agricultural and mineral wealth, has a variety of climates, is well watered, and numerous waterfalls exist along the route which could be used for generating electricity with which to operate the railway. The completion of this line would connect Tegucigalpa by rail with a port on the Pacific coast and would open up one of the least developed sections of Honduras. Considerable business is now done through the Pacific coast port of Amapala, but it is contended that the opening of the port of San Lorenzo to railway traffic would cause a wonderful development along the route of the proposed line, not only in agriculture, but in mining, stock raising, and the exporting of precious woods.



During the last 10 years about \$86,000,000 has been invested in the exploitation of PETROLEUM deposits near Tampico in the State of Tamaulipas. Of this amount the investments of North American capitalists represent about one half, while the other half belongs to English, Dutch, French, and Mexican investors. The production of the Tamaulipas fields increased from 1,000,000 barrels in 1907 to

16,000,000 barrels at the close of the fiscal year 1913. The exports to the United States during the latter year aggregated 10,000,000 barrels. The quality of the oil produced in the State of Tamaulipas is equal to that obtained from the wells of Texas and Louisiana. Most of the oil is taken from overflow wells, and is delivered to tide-water either in barges, by rail, or through pipes. Statistics show that oil is found in Mexico at an average depth of about 2,000 feet. The Tampico fields cover an area, roughly calculated, extending a length of 150 miles north and south and reaching as far as the foothills of Sierra Azul, and of a width of from 30 to 40 miles from the coast. The northern shipping port for this district is the city of Tampico, and the southern is Tuxpan. It has been estimated that the known and well-defined oil fields of Mexico cover at the present time an area of about 6,000 square miles. The production of some of the Mexican wells is enormous. One of these, known as Juan Castaños No. 27, produced in three years and three months 24,000,000 barrels. Another great producer is the Potero del Llano, belonging to an English company, which has a capacity of 30,000 barrels per day. This well produced in three years between eleven and twelve million barrels. The Dos Bocas well emitted a column of oil 200 feet high at a temperature of more than 100°. This column took fire and burned for 57 days, destroying hundreds of thousands of barrels per day and defying all efforts to extinguish the conflagration. The oil in this well was finally exhausted and hot water was thrown up instead. The Topila district, about 25 miles northeast of the Dos Bocas well, produced about 100,000 barrels per annum until the deposit was exhausted and cold water began to flow from the well in place of oil.—Arrangements have been made to open to traffic in May, 1914, a public HIGHWAY or military road leading from the Federal Capital to the city of Pachuca.—French capitalists are negotiating in the City of Mexico for a franchise under which to organize a HOUSE CONSTRUCTION company. The capital of the proposed company is 15,000,000 pesos (\$7,500,000).—Upon the recommendation of the department of public instruction of the Mexican Government, an order has been issued to Mexican consuls authorizing them to validate, in accordance with the laws of the Republic, the DIPLOMAS of professional men in foreign countries who desire to practice their professions or callings in Mexico.—A decree has been issued placing an export duty of 3.25 pesos (\$1.62) per 100 kilos on clean COFFEE and 3 pesos (\$1.50) per 100 kilos on coffee in parchment. The effect of this decree has been to raise the price of coffee in the domestic markets of the Republic, second-grade coffee being quoted in Veracruz at 28 pesos (\$14) per 45 kilos and first-grade coffee at 31 pesos (\$15.50) per 45 kilos.



NICARAGUA

That the Government of Nicaragua is fully alive to the importance of encouraging the production of the finer grades of stock of all kinds is evidenced by a decree of President Estrada, to which the Government desires to call the attention of farmers and stockmen in general. By virtue of this decree the Government offers, in addition to exemption from duties, a premium on all registered stock of good breeding imported into the country. This premium is equal to the amount of ocean freight paid from the port of origin to the port in Nicaragua. If the animals have been previously shipped from some other country to the place from which they are imported into Nicaragua the amount of the premium shall be increased to also cover the amount of the former freight. In order to secure such a premium the interested parties must present to the department of fomento the certificates of breeding, age, ability of reproducing, and other descriptive details furnished by responsible parties in the place of origin of the animal imported; shipping and unloading manifests signed by the proper officials; and a copy of the register kept by the jefe politico or commandant of the district of entry, which must show the race, origin, condition, date of importation of the animal, and the name of the importer. Upon receipt of such documents the department of fomento will obtain the order for payment of premium from the department of finance and the same will be cashed from the public treasury. The decree further provides that all persons who may acclimatize and cultivate foreign pasture grass of superior quality to that of the native, in minimum extension of 50 hectares, shall receive in addition to exemption from duties of the seed imported a premium of 50 cents gold per hectare; when the planted area exceeds 1,000 hectares the premium is 25 cents per hectare. The acclimatization and cultivation of foreign species of rubber is also subsidized with 5 cents gold for each tree after the fifth year of its planting, provided that the quality of rubber produced is superior to the indigenous product. Machinery designed for manufacturing products of wheat and henequen is also exempted from duties and a premium offered to the importer equivalent to the freight from port of origin to any port in Nicaragua. The Government also offers a subsidy of 20 cents gold for each hundredweight of first-class flour and 10 cents gold for each hundredweight of henequen fiber produced in the country for a period of five years from the date of the decree. Manufacturers of products of the native cactus also enjoy free importation and reimbursement for freight on modern machinery used for exploitation of these products.—Under a recent decision of the Mixed CLAIMS

Commission, all claims under \$40,000 are to be passed on without a public hearing unless the Government or claimant should otherwise direct.—A company has been organized by A. G. Kerr, of Cincinnati, Ohio, to develop the Dos Amigos MINES in the Prinzapolka mining zone of the Republic on an extensive scale. These well-known mines were formerly owned and operated by Mr. Kerr. Expert mining engineers will be employed to assist in the development of the property.—The Sioux PLANTATION Co., of Sioux Falls, S. Dak., has decided to develop its property at the junction of the Sicsiewass and the Grande Rivers. The property is located above and within a short distance of the property of the Pan American Fruit & Fiber Co. Development work has been placed in charge of Jacob Olson, an agriculturist from the United States.—The total CUSTOMS RECEIPTS of Nicaragua for 1913 amounted to \$1,729,013.49, or an increase of \$556,618.23 over that of the previous year.



The Government of Panama has contracted with R. W. Hebard & Co., of the city of Panama, to construct the buildings to be known as the Government Palace and the Palace of Arts of the NATIONAL EXPOSITION of Panama, in accordance with plans prepared by special architects of the Panama Government, and to deliver the same, complete in every particular, to the Government on August 15 and September 1, respectively, of the present year. The Government reserves the right, should it have reason to believe that the buildings will not be completed within the time specified in the contract, to limit the contractors to the completion of one of the buildings and to make additional contracts with other builders for the finishing of work on the remaining building, payment to be made to the original contractors for such work as they may have done. The supervision of construction work and the acceptance of the completed buildings are to be under the direction of Government architects or of their authorized representatives. The contractors have deposited \$10,000 in the National Bank of Panama as a guaranty for the faithful performance of their part of the agreement. The contract, which required the sanction of the President of the Republic, was approved by him on February 10, 1914, and the full text thereof was published in Spanish in the Gaceta Oficial of January 31 of the same year.—The Government of Costa Rica approved on February 10, 1914, a convention for the exchange of postal MONEY ORDERS between the Republics of Costa Rica and

Panama. The convention becomes operative, after ratification by both contracting countries, upon a date to be agreed upon by the department of posts of the Republic of Costa Rica and the secretary of government and justice of the Republic of Panama. The convention will continue in force until terminated by mutual consent of the parties in interest, or until annulled by the notification of one of the countries to the other of its desire to terminate the convention, said notification to be given six months before the date of the termination of the convention.—The Government of Panama has authorized the formation of two Chinese societies in the Republic with headquarters in the city of Panama. One of these organizations is entitled the "Progressive Club," and the other the "Impartial Asiatic Club."—A recent executive decree exempts divers from the provisions of the law prohibiting fishing and diving with machines in waters under 8 fathoms in depth at low tide in the exploitation of the MOTHER-OF-PEARL industry.—An appropriation of \$60,000 has been added to the GENERAL BUDGET for the conservation and repair of buildings, bridges, and roads, and for the completion of public works at New Gorgona.—Juan Ehrman has been granted permission by the Government of Panama, subject to the approval of Congress, to construct a DRY DOCK on Taboga Island, in the Gulf of Panama, and to exploit the same for a period of 50 years.—The department of public works of the Government of Panama has ceded to Benjamin F. Ellinger, an American citizen, 1,000 hectares of land to be used for the purpose of establishing an AGRICULTURAL COLONY in the Province of Chiriquí. Within the next three years the concessionaire agrees to settle on said land not less than 20 American or European families of agriculturists.



The legation of Paraguay in Washington has furnished the MONTHLY BULLETIN with data showing that the DEBT of the Republic of Paraguay on September 30, 1913, expressed in gold pesos and paper currency, was as follows: Foreign debt, 3,917,600 gold pesos, and the internal debt, 50,740,900 paper pesos.—The general expense BUDGET has been sufficient to meet the expenses of the Government. The following PUBLIC WORKS have been completed with funds appropriated from the general revenues: Enlarging and arranging office of the prefecture general of ports; of the customs warehouses at the capital; of the intendency general of war and marine; repair of the building and offices of the department of war and marine and

purchase of a new building; construction of office and warehouses of the Agricultural Bank in order to facilitate the handling of products of the country, and the construction of a wharf at Villa Pilar. Private companies have constructed tramways and electric plants, and have placed in operation a ferryboat in conjunction with the opening to traffic of the international railway from Asuncion to Buenos Aires.—A number of bridges have been built, and more than 20,000 meters of roadbed have been constructed in the Republic under the orders of the department of fomento, the chief of which received a technical education in the universities of the United States.—On the branch from Borja to Iguazu of the Asuncion to Encarnacion RAILWAY 70 kilometers have been built and construction work is actively progressing. The total length of this branch is 260 kilometers. On the Paraguari to Misiones Railway survey work has been completed to Villa Florida, a distance of 110 kilometers, and construction work will soon be begun to Carepegua, a distance of 24 kilometers. On the Concepcion to Belen line, 350 kilometers, 30 kilometers have been completed to a point near Horqueta.—The house of Barthe, Hermann Krab & Co. and the Mihanovich & Vierci Co. have increased their RIVER TRAFFIC.—The PORT OF ASUNCION is to be enlarged, since there is not sufficient room for the numerous vessels which enter and depart daily.—The use of AUTOMOBILES has increased and an auto club has been established.—The ARMY is divided into five military zones, with headquarters at Concepcion, Paraguari, Encarnacion, Pilar, and the Chaco region. The NAVY is composed of the following vessels armed with Vicker's artillery, model of 1911, Maxim, Armstrong, etc.: *Constitucion, Adolfo Riquelme, General Diaz, and Triunfo*. The following are the principal military transports in use: *Ludovico, Independencia, Manuel, Libertad, and Coronel Martinez*.—In the reorganization of the ARMY of Paraguay eight German Army officers have signed contracts to serve three years each.—The Government of Paraguay has negotiated with The Paraguaya Corporation, a North American company with offices at Asuncion, organized under the laws of the State of Delaware, for the placing of an issue of £1,250,000 (\$6,075,000) BONDS, to be known as "5 per cent foreign gold bonds of the Republic of Paraguay, 1914." The loan is made under a law bearing date of November 28, 1912. The bonds draw 5 per cent interest per annum, payable semiannually on the 1st of the months of July and January of each year, and an accumulative amortization fund of 1 per cent annually is provided for. The first interest coupon is for five months and is payable on January 1, 1915. The cash proceeds of the sale of the bonds shall be placed at the disposal of the Government of Paraguay not later than July 31, 1914. The payment of interest and amortization is secured by 25 per cent

of all customs receipts, either of imports or exports, except the export duties on Paraguay tea and hides. The Bank of the Republic at Asuncion is made the depository of the interest and amortization funds until such time as the parties in interest may deem advisable to designate another bank for this purpose. If at any time 25 per cent of the customs receipts set aside for the payment of interest and amortization should be insufficient to liquidate these payments, then the Government agrees to appropriate such a sum as may be necessary to cover the difference. The Paraguaya Corporation has given to the Government of Paraguay a guaranty of £10,000 for the faithful fulfillment of the terms of the contract.—In 1913 the exports of TOBACCO from the port of Asuncion consisted of 56,476 bales, weighing 5,488,277 kilos, classified and approved by the Government's inspectors, and 728 bales, weighing 69,077 kilos, of unclassified tobacco.—The department of fomento of the Government of Paraguay has entered into an adreferendum contract with Handley Cysalensky to demonstrate the intensive cultivation of COTTON in the Republic and has ceded him lands for that purpose.



Immediately after the resignation of President Guillermo E. Billinghurst on February 4 last the National Congress in session at Lima unanimously elected a GOVERNING BOARD composed of the following members to temporarily exercise the executive power in accordance with the laws of the country: Col. Oscar R. Benavides, Dr. J. Matías Manzanilla, Dr. Arturo Osores, Engineer José Balta, Dr. Rafael Grau, and Dr. Benjamin Boza.—A law has been promulgated authorizing the executive power to appoint a committee composed of two employees of the treasury department, an employee of the Callao customhouse, one member each from the Boards of Trade of Lima and Callao, a member from the industrial society, one member each from the national societies of mines and agriculture recommended by these organizations, a chemist recommended by the medical college, and a lawyer recommended by the supreme court, to formulate a CUSTOMS TARIFF and a customs code which will treat of the following subjects: (1) Maritime ports and their classification; (2) fluvial ports; (3) lacustrine ports; (4) maritime, fluvial, and lacustrine transportation; (5) wharves and tariffs; (6) discharge of freight; (7) warehouses; (8) consular invoices; (9) customs classification and dispatch; (10) agents' samples; (11) baggage; (12) appraisements; (13) warehouses and storage; (14) franchises to foreign

and domestic navigation companies; (15) free merchandise; (16) auction of merchandise; (17) prohibitions; (18) fines, penalties, etc.; (19) customs bounties; (20) customs courts; (21) powers of customs administrators; and (22) land traffic. When the work of the committee is completed, the plans recommended by it are to be submitted to Congress for consideration. An appropriation of £800 (\$4,000) has been made for the expenses of the committee in carrying on the work connected with the revision and compilation of the proposed customs tariff and code.—For some time past a group of London capitalists has been investigating MINING properties and opportunities in the Republic of Peru with the object of making large investments in that line of industry. Reports made on a number of mining properties by expert engineers are said to have been of such a flattering nature that all the capital needed for the development and exploitation of mines and smelters will be available if transportation facilities and the general conditions of the country and markets should warrant them in going into the business on a large scale. No definite plans of these capitalists have yet been communicated to the public, but it is generally believed that considerable capital will be invested in mines in the near future.—The cost to the city of Callao for the laying of its SEWER MAINS, the work having been done administratively under the direction of expert engineers, was £3,600 (\$18,000).—The governing board of Peru, of which Col. Oscar R. Benavides is president, has provided 33 free SCHOLARSHIPS for 1914 in the SCHOOL OF ARTS AND CRAFTS at Lima. These scholarships are apportioned to the different departments. They will be issued to candidates eligible for admission who stand highest in the competitive examinations which will be held by the department of fomento on May 1, 1914.—The sum of £300 (\$1,500) has been appropriated by Congress to be used in completing the BREAKWATER at Ancon, and funds have been provided in the departmental budget of La Libertad with which to finish the installation of the Otuzco WATERWORKS.—The city of Iquitos has taken preliminary steps to issue BONDS for the erection of a municipal market, material for the construction of which has been imported from Europe.



According to a MESSAGE which President Carlos Melendez delivered to the National Congress on the occasion of the opening of its regular sessions on February 20 last, there were 856 schools in operation in the Republic in 1913. Of this number, 711 were Govern-

ment schools, 47 private, 91 municipal, and 7 charity schools. The number of pupils who matriculated in these schools during the year was 50,550, and the average attendance was 38,121. The budget for 1913 provided for the establishment of 137 new schools, 77 of which were night schools and 60 rural schools. During the year the school of medicine was installed in its new building and furnished with new furniture and additional equipment. The school of pharmacy has recently received equipment valued at 10,000 francs (\$2,000). The Institute of Natural History has again been placed under the direction of the department of fomento. The National Observatory was equipped with valuable scientific apparatus during the year. The amount expended by the Government in 1913 for scholarships was about 60,000 pesos (\$26,040). Funds aggregating 166,124 pesos (\$72,098) were provided for the erection of a normal-school building at "Quinta Natalia" in the city of San Salvador. Through the department of agriculture the Government of Salvador in 1913 placed at the disposal of the National Society of Agriculture the sum of 50,000 pesos (\$21,700), to be used in the encouragement and development of agriculture in the Republic. During the past year the society aided in the publication of an agricultural magazine and contributed to the maintenance of the experiment station of the agricultural college. The central board of agriculture has two experimental stations in the Federal Capital used for the purpose of propagating tree growth in the country. During the past year these stations distributed free to municipalities and individuals more than 80,000 young trees. Imports of seeds and plants are constantly being made by the Government for experiment and propaganda work. The revenues of the Republic in 1913 amounted to 14,445,731 pesos (\$6,269,447), as compared with 13,734,133 pesos (\$5,960,613) in 1912. The revenues from imports in 1913 were 7,263,043 pesos, (\$3,152,160) as compared with 8,324,869 pesos (\$3,612,-33) in 1912. The revenues from export taxes in 1913 were 1,515,385 pesos (\$657,677), as compared with 1,400,894 pesos (\$607,-988) in 1912. The total expenditures of the Government in 1913 were 16,178,910 pesos (\$7,021,647), as compared with 15,678,073 pesos (\$6,804,284) in 1912. The banking situation, settled in accordance with the provisions of an executive decree of November 7, 1913, is satisfactory. The effect of this decree has been of such a nature as to protect both the interests of the depositors and stockholders of the banking institutions of the country and to insure the transaction of business on a safe and equitable basis.



URUGUAY

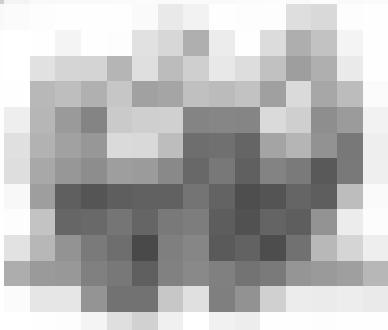
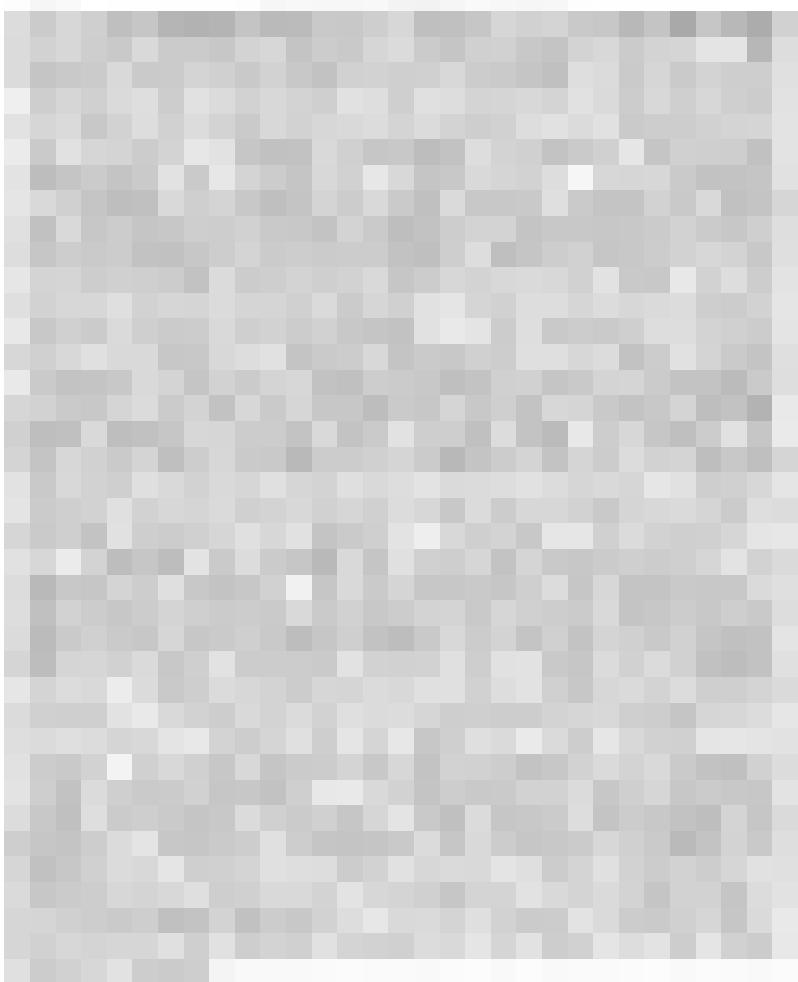
The legation of Uruguay in Washington has kindly furnished the **MONTHLY BULLETIN** with a short extract from the **MESSAGE** of the President of the Republic, delivered on the occasion of the assembling of Congress in the capitol at Montevideo on February 15, 1914, in which the executive states that the year 1913-14 will close with a complete adjustment of the financial situation and satisfactory revenues. The domestic and foreign securities of the country continue firm, as does also the value of land. The imports in 1913 were, in round numbers, 240,000,000 francs (\$48,000,000) and the exports 315,000,000 francs (\$63,000,000), or an excess of exports over imports of 70,000,000 francs (\$15,000,000). The public debt paid during the year was 3,047,487 pesos (\$3,151,102), while the additional internal debt contracted during the same period amounted to 6,051,300 pesos (\$6,257,044). The increase of the internal debt was caused by the consolidation of the Mortgage Bank, acquired by the State, and the extension of the electric service. This increase was absorbed by local capitalists and banks. During the year the Bank of the Republic increased its capital to 65,138,892 francs (\$13,027,778), on which net earnings of 8,486,353 (\$1,697,270) were realized. At the present time this bank has cash on hand amounting to 60 per cent of its obligations payable on demand. The earnings of the Insurance Bank during the year were 2,607,602 francs (\$521,520). The Mortgage Bank, which belongs to the State, has a capital of 19,453,800 francs (\$3,890,760), and earned during the year 1912-13, 1,623,342 francs (\$324,668), and the estimated earnings to March, 1914, are 2,160,000 francs (\$432,000). The electric installations had profits during six months amounting to 2,700,000 francs (\$540,000). The State saved 4,095,705 francs (\$819,141) over railway guarantees, due to the good results of traffic during the year. The traffic of the port of Montevideo during the year was 12,925,000 registered tons, or 1,912,374 net tons of cargo, most of the business being done from vessels anchored at the wharves. The domestic situation is perfectly tranquil and the relations of Uruguay with foreign countries completely amicable.—In January, 1914, the total **REVENUES** of the Government of Uruguay, collected on imports and exports, storage, lighterage, etc., amounted to 1,434,049 pesos (\$1,477,070).—The consul of Uruguay at Bergen, Norway, has reported to the Uruguayan Government that after the inauguration of the new line of steamers between Montevideo and Bergen, the first sailings of which were made in March last, a new market will be available for the sale of Uruguayan salt meats and other products of

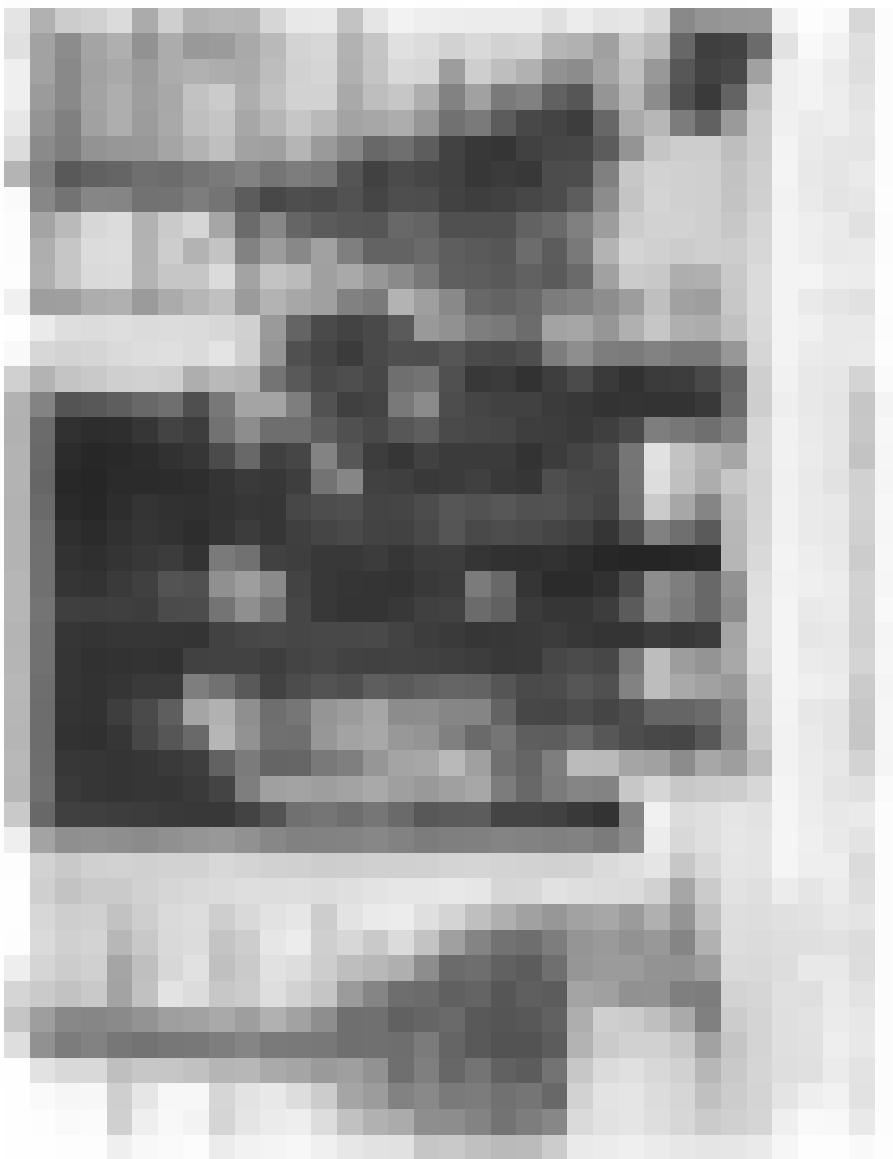
the country.—The Northern STREET RAILWAY system of Montevideo has prepared a plan showing that the proposed extension of its line in the Federal Capital amounts to nearly double the trackage now in operation.—The RADIUM Institute of the University of Medicine of Montevideo has issued rules and regulations governing the use of radium in the treatment of disease in the city of Montevideo and establishing a tariff of charges.—The President of the Republic of Uruguay has appointed Drs. Alfredo Vidal y Fuentes, Ernesto Fernandez Espiro, and Jaime H. Oliver as its delegates to the International SANITARY CONFERENCE, which will meet in Montevideo on April 10, 1914, and to which the Argentine and United States Governments have been invited.—The TOBACCO crop of Uruguay in 1913 amounted to 1,388,000 kilos.—In 1913 there were 485,806 head of CATTLE slaughtered in Uruguay for the export trade.

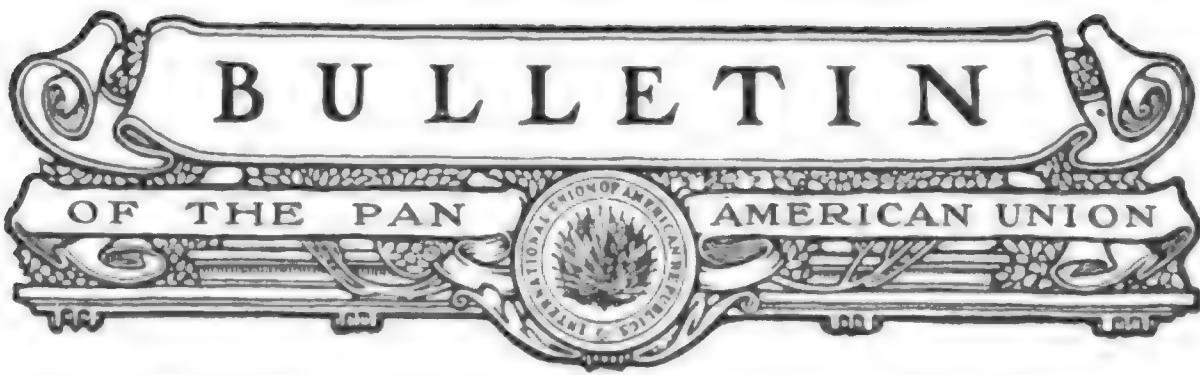


VENEZUELA

A recent report on the Amparo GOLD MINES, published in Spanish in "El Universal," of Caracas, states that these mines are situated 12 miles east of Guasipata, capital of the State of Yuruari, and within a dozen miles of the celebrated "Callao" mine in one of the greatest gold-producing zones of the Republic. According to the report the property consists of 400 acres of hilly and wooded land in the form of a rectangle, traversed from east to west by a deep canyon, the bottom of which is covered with a layer of alluvial earth containing gold. The mine was discovered about three years ago and has been worked over a width of from 50 to 100 feet for a distance of about half a mile. Twenty-five galleries from 30 to 90 feet in length have been excavated along the sides of the canyon. One of these is being extended over a vein of low-grade gold ore and at present has a length of about 150 feet, all of which has been timbered with wood cut from the neighboring forests. By following up this vein during the past year and extracting ore from the mine the production in 1913 amounted to 1,280 tons of ore, which produced 3,843 ounces of gold, valued at \$76,860. The ore is low grade, assaying on an average 3 ounces of gold per ton. The mine has facilities and machinery for extracting 100 tons of ore daily, but the mill at the present time has a capacity for grinding only 50 tons of ore per day. It is rumored that the grinding capacity of the mine is to be increased in the near future by adding an additional crusher to the plant. The mine contains other veins in the experimental stage which have not been thoroughly worked nor completely developed, some of which







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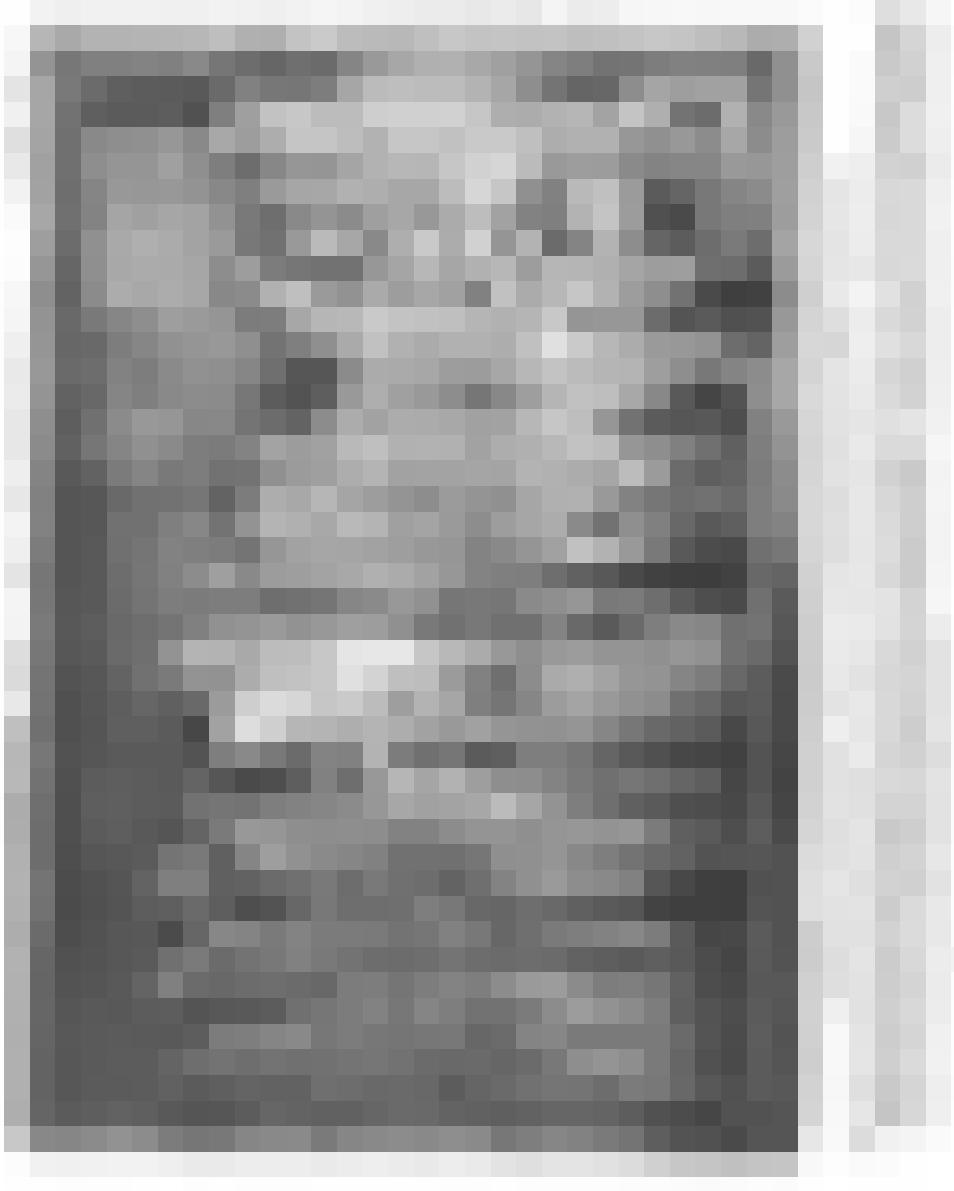
HONORING HEROES

THROUGHOUT Latin America most conspicuous illustrations of the love and loyalty of the people are found in the countless statues and monuments erected to the memory of fallen heroes. No village of any consequence is without its alameda or central plaza, and very often this public place bears the figure of some one famous in local or national history. The love of music is another characteristic, and the park is the general rendezvous for old and young: the former perchance extol the deeds and virtues of the hero who is symbolized near by, and the youth, stirred by patriotic airs, grow in knowledge and in loyalty to their forefathers who fought and died for just causes.

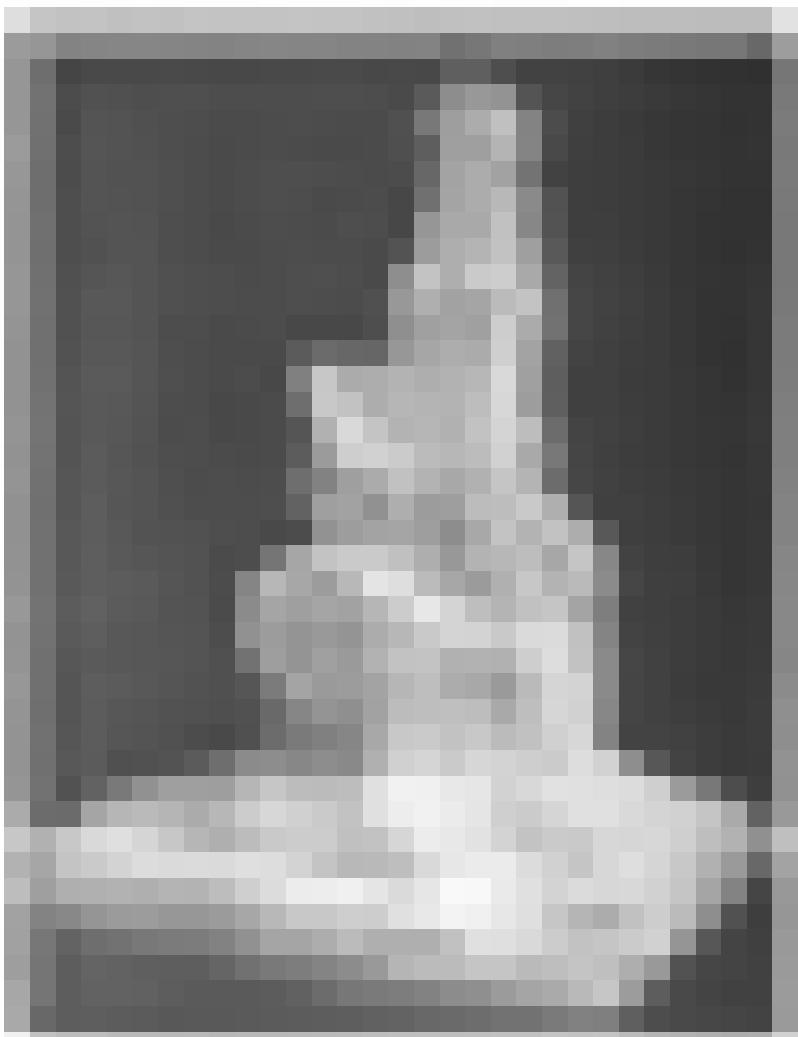
The life story of the famous liberator, Simon Bolivar, who aided not only one nation to throw off the yoke of oppression, but whose triumphs are recorded by monuments in various lands, reads like a romance. Gen. Bolivar achieved the independence of three countries—feats that are rendered all the more remarkable when we remember the lack of transportation facilities of those early days.

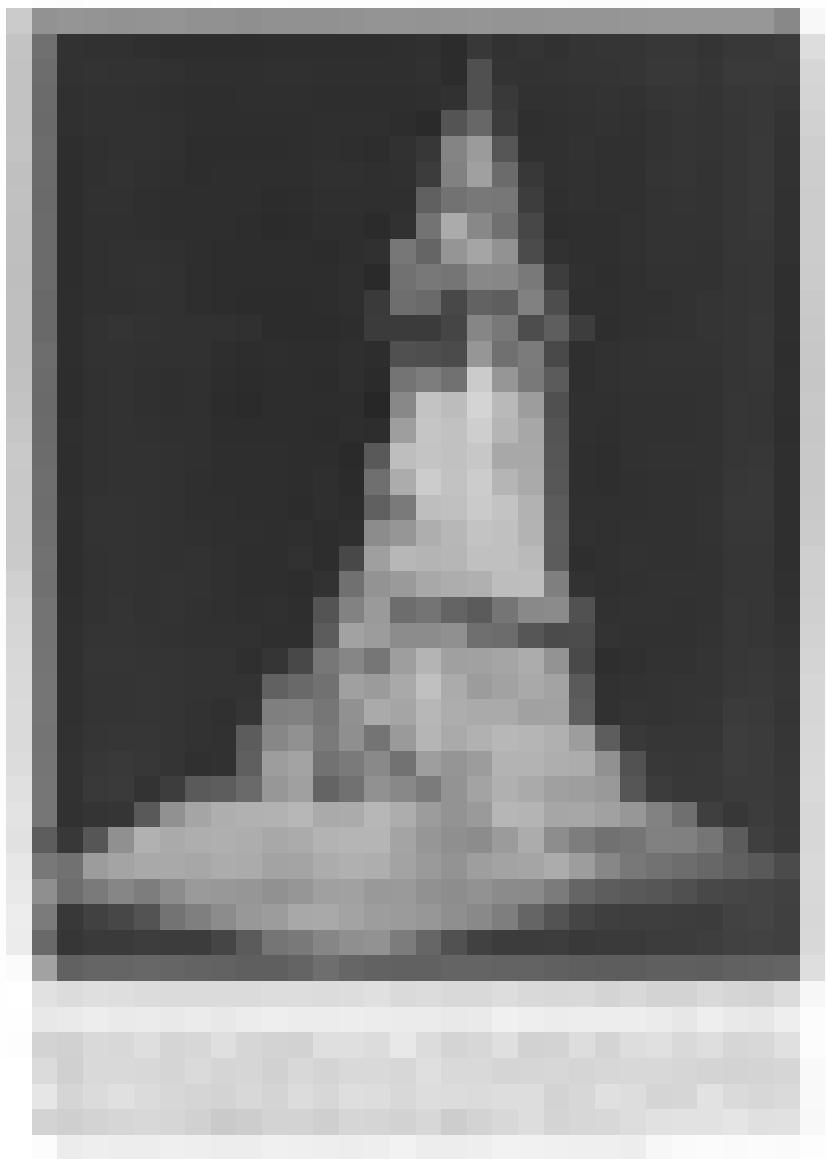
Caracas, the native home of Bolivar, honors him with a magnificent monument. Likewise other countries have paid tribute to his memory by the erection of monuments, while the North American metropolis placed in Central Park a splendid tribute to this beloved South American hero.

Far to the southward the people also continue to erect monuments to their heroes. Commemorating the passage of the Andes from Argentina to Chile, a wonderful military triumph accomplished years ago by San Martin, the Argentine hero, a monument was recently placed in Mendoza, from which place the perilous march over the Andes was begun. This monument represents Gen. San Martin astride his favorite horse pressing forward, closely followed by his faithful men. A bugler is depicted as straining every nerve of self and steed in order to echo the commands of his leader, while above the whole group a white angel of victory typifies a worthy cause.











Another section of Argentina has recently honored Gen. Urquiza by erecting a statue in the city of Parana. This hero won the Battle of Caceros in 1852 and thereby ended the rule of the Rosas. This beautiful sculpture was done in Spain; it is colossal in size and represents the hero astride a splendid steed. Gen. Urquiza, it will be remembered, was the first president of the Argentine Confederation (1853-1860) and did a wonderful work in molding the history of the country which has since grown into membership of the great nations of the world.

Several years ago the Government of Uruguay instituted a competition for designs for a proposed monument to Gen. Artigas, the victor of the Battle of Las Piedras and the great hero of the war for Uruguayan independence. This competition was open to native and foreign sculptors, and the many designs submitted showed the activity of competitors. The committee found two statues of equal excellence, one designed by an Italian and the other by a Uruguayan sculptor, and has ordered another competition between the two artists. The work of one of the North American sculptors received favorable mention.

This memorial is to be placed in Independence Square in Montevideo, the total cost of which will be more than \$100,000. When completed, it will be one of the most beautiful in South America. Of colossal size, it depicts the mounted commander overlooking a field of victory. His soldiers near him are proclaiming their joy, while two female figures forming the top of the monument are symbolical of democracy and the Republic.

Mercedes, a city in the western part of Uruguay, is to have a monument to commemorate the dawn of independence. This tribute will adorn one of the principal squares of that city, and a prize of \$20,000 was offered for the best design submitted to the committee in charge of the work. Competition was active and the actual monument will doubtless be a marvel of beauty and in its allegorical design rival anything of like nature in the country.

Another unique memorial is to be found adorning the wall of one of the rooms in the beautiful building erected by the Daughters of the American Revolution in the city of Washington. It is in the form of a bronze tablet and shows George Washington, Thomas Jefferson, Benjamin Franklin, La Fayette, and other leading figures in the great battle for independence, and included in the group is seen the figure of Bolivar, representing the heroes of South America.

The tablet was the gift of Madame Leferme, a French lady, who through the medium of his excellency M. J. J. Jusserand, the French Ambassador at Washington, presented this work of art to the patriotic women of the United States who are working tirelessly to perpetuate the memories of their heroic forefathers.

COCA--THE WONDER-PLANT OF THE ANDES¹ .

Three leaves supply for six days' march afford,
The Quitoita with this provision stor'd
Can pass the vast and cloudy Andes o'er. Cowley.

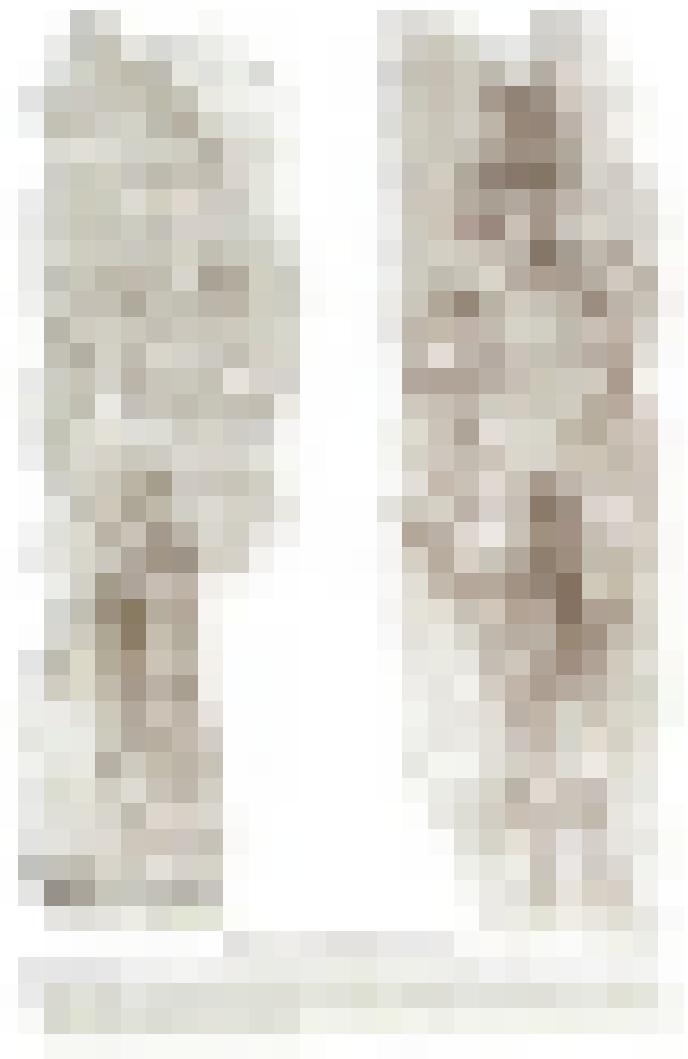
MANY years ago when Inca civilization reigned over a vast section of the western part of South America young men engaged in athletic contests, as they do to-day, and among the most coveted rewards the victors could expect were little pouches filled with dry leaves. Each pouch perchance bore the handiwork of some dusky maiden, marvelously wrought in accordance with the teachings of Mamma Ocello, the famous character who tradition says came forth from mysterious Lake Titicaca to teach the world the art of spinning and weaving. Accompanying the pouch of leaves, or chuspa, as it was called, was a small gourd known as the popóra, containing lime; the leaves had been carefully plucked from the "divine plant," coca, while the lime served to make them more pleasing to the taste. The two substances, combined, formed a strength-producing element of wonderful power. Subjects of the Inca who thus fortified themselves by chewing coca leaves believed their bodies possessed super-human endurance; and the happy victor of an Andean "Marathon" doubtless gave due credit to the sustaining power of coca.

When Pizarro landed in Peru and his cavalcade journeyed up the mountains toward Cajamarcá, native messengers who bore to the Inca chieftain the news of the arrival of strange faces are said to have been buoyed onward by the ever-sustaining force of coca leaves. To-day the Inca descendant includes the sacred leaf as a part of his equipment when starting forth on a journey, and he probably prizes it as highly as did his forefathers in the olden days when this wonderful plant was "presented to the waiting world."

The leaves were used at offerings to the sun; to make smoke at sacrifices; tied up in crude packages they were thrown into streams and the faithful believers followed them for days as a demonstration of faith and fidelity; and at death a supply of leaves was always placed with the body of the deceased.

Through the ages the sacred coca plant has passed its strange power from generation to generation; scientists have studied and investigated its properties; physicians all over the world have praised

¹ By William A. Reid, Pan American Union staff.



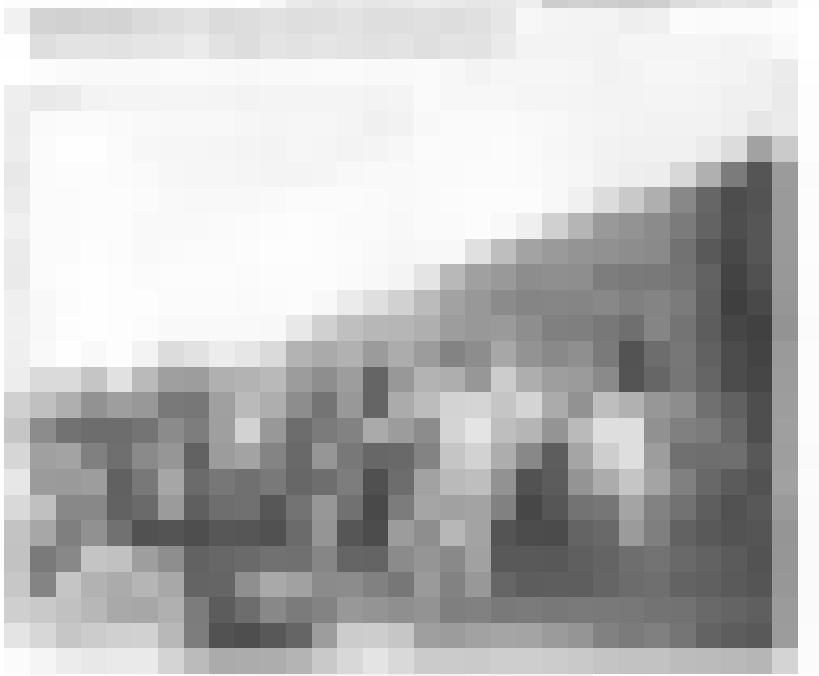
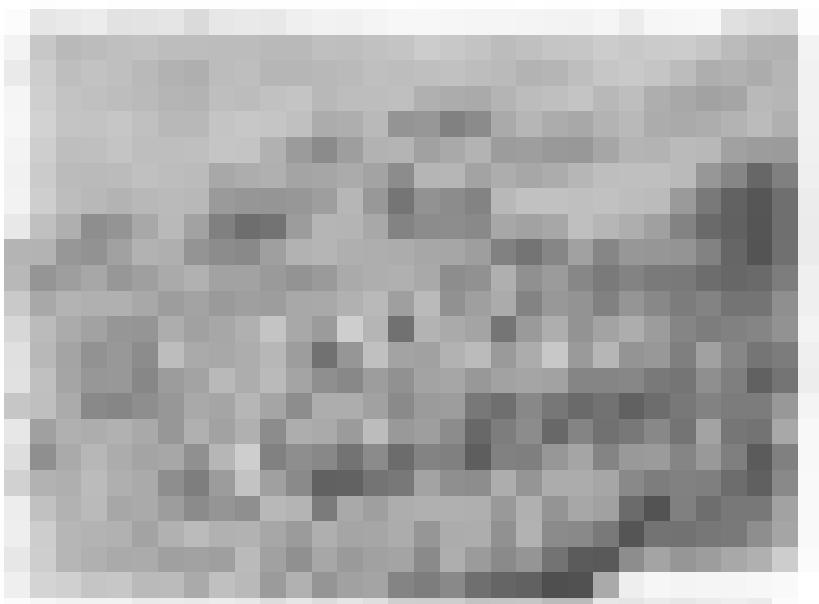
and condemned it; and quite recently the Congress of the United States saw proper to discuss this mysterious plant, while our greatest city has appointed a woman whose sole duty is to look out for cocaine-law violators. Indeed, enlightened man to-day has adopted the coca plant of the aborigines; and the physician finds cocaine, a product of coca leaves, a most important medium for alleviating pain and for countless uses in the medical profession.

What is coca? In the first place, the plant should not be confounded with the cocoa or chocolate bean from which is made the delicious beverage and the food so popular in many parts of the world. Cocoa is produced from the seeds of the palm, *Theobroma cacao*, a tree found in tropical America, whose product was first taken by the Spaniards to European countries. Chocolate as generally known and used is prepared from cocoa, and the former word is believed to be of Mexican origin, viz., choco = cacao; latl = water.

Roughly speaking, the home, possibly the original home, of the coca plant may be defined as covering sections of Colombia, Ecuador, Peru, Bolivia, and Brazil; while it is also cultivated in the West Indies, Ceylon, India, Java, etc. The plant, *Erythroxylon coca*, somewhat resembles the blackthorn bush of the United States, and grows to the height of 6 or 8 feet, according to altitude and climatic conditions. For example, in the region of southern Colombia, at about 3,000 feet altitude, and in other sections of the Andes, the plant often measures 12 feet in height; but as the mountains are ascended the bush degenerates into a small shrub.

The plant's branches are straight; the leaves are green, thin, opaque, oval, and tapering at the ends. A peculiar characteristic of the leaf is an areolated section bounded by two curved lines, one on either side of the main rib. The pretty little flowers of the coca form in clusters on short stems; the corolla is composed of five petals of a yellowish white color, and the pistils have three carpels. The flowering season is followed by a production of red berries. In growing coca the seeds are usually sown in December and January on small plots of land sheltered from the sun. By the time they are 1½ or 2 feet high they are transplanted to the larger plots or "cocales," as the plantations are called, and after growing for a year or two the plants become productive, and especially so when in damp and warm localities; but the best leaves are obtained from plants growing in dryer sections, such as on the hillsides. A plant may be productive for 40 years or longer.

Let us briefly view a modern coca plantation. Could one be transported suddenly and placed within view of a cocal of the eastern Andes it might at first glance be difficult to decide whether the scene was in Japan or in South America, so much do the cocals resemble the intensively cultivated tea plantations in the Orient.



The cocals are scattered along the Andes, generally on the eastern slopes, from Colombia to Bolivia. Beginning in the low forest where vegetation is almost impenetrable, they are to be seen here and there in mountain clearings up to about 6,000 feet altitude. Small plots of land from half an acre up appear to satisfy the average coca producer. On this small area the young plants are set a few feet apart, so as to make about 7,000 plants per acre, or 1,800 plants per cato, to use the local term. An average yield of 4 ounces per plant amounts to 450 pounds per cato at each harvest, and there are three harvests a year, about March, June, and November, respectively, the first one being considered the best or most fruitful. This yield would make over a thousand pounds of fresh, or something over 500 pounds of dried leaves for shipment.

The coca plant when found wild is usually larger than the cultivated shrub, because the planter keeps it pruned to a convenient height for harvesting the leaves. The pluckers are skilled in their work, and usually squat in front of a bush and by a long-practiced knack or dexterity soon strip the leaves, using both hands in the operation. At other times more care is exercised, and the picker selects only the best leaves, gathering them one by one. In either case they pass from the hands into an apron or poncho; and four or five experts by the former method can gather a "cesta," or about 25 pounds, in a day. The product is then carried to sheds and spread upon rough stone beds or upon hard ground to dry, a stage requiring the closest watching in order that no rain may fall upon the drying leaves. This drying process may be completed in from 8 to 10 hours if weather conditions are favorable, and then the leaves are ready to pack and begin their long journey overland to the nearest market.

Usually the cocals are worked by natives, women and children predominating in the work. If outside help is employed, these laborers are paid from 25 to 30 cents for each 30 pounds of leaves picked. In other words, if conditions are good, the coca costs the planter less than 3 cents per pound at his cocal. Put up in pound packages the best grade of leaves is worth at seaport about 35 to 45 cents per pound.

The greatest coca section of Bolivia lies in the Department of Yungas, and some of the chief towns whose industry is composed largely of coca traffic are Chulumani, Irupana, Chupe, Chirca, etc. At one time the Yungas region sent to the La Paz market more than half a million baskets of coca leaves annually, and each basket weighed about 70 pounds. Such a traffic through a land where modern transportation is just beginning to penetrate, demanded, of course, hundreds of men and animals, and even to-day the coca caravans, if such they may be termed, are a most interesting sight and one that the moving-picture man apparently has failed to secure.

The transportation of coca leaves from the plantation to the market is slow and expensive, for usually long and rugged distances must be covered, and the product carried on the backs of natives, mules, or llamas. The leaves are packed in various ways; sometimes in large sacks trodden tight by the feet of packers, and again they are made into bales and wrapped with banana leaves, with an outer covering of coarse cloth. Charcoal is sometimes added to keep the leaves moist.

In some sections of the Andes the traveler often notices the coca packages wrapped in materials of bright and varied colors, which lend a touch of the picturesque as a coca cavalcade wends its way wearily along mountain cliff or ravine, where a false step would precipitate animal or master to instant death. Many mules carry six "tambores" or packages strapped together, making a load of 300 pounds. If transported by llama the packages are considerably smaller, as this beast of burden quickly resents an overload.

Two varieties of leaves are coming to the markets in the United States—the large leaf or Bolivian coca, and the small leaf called Truxillo or Peruvian coca. Leaves for chewing purposes are selected by the odor, sweetness, or bitterness.

The odor appears to follow the leaves wherever they are taken, and upon opening a bale there is an aromatic odor somewhat like that of Chinese tea or the vanilla bean, but the practiced pharmacist usually selects the genuine from the spurious or low-grade leaves with little difficulty.

In 1912 Bolivia exported 385 metric tons of coca leaves, the value of which was 736,290 bolivianos, or nearly \$300,000. In 1910 Peru shipped to foreign lands more than \$345,755 worth of cocaine made in her factories. The following year the best leaves were worth \$22 per quintal of 100 pounds at Salaverry, a port from which large quantities are shipped. This price was regarded as extremely high.

A year or so ago when traveling in the home land of the coca plant the writer frequently inquired the distance from one place to another, and many answers of the humble natives were given in the measure of coca leaves; that is, so many handfuls of leaves marked the distance. This meant that the native could cover the distance by having the required quantity of leaves to nourish and sustain him on the journey.

The beautifully worked chuspa or pouch referred to at the beginning of this article has in many cases degenerated into a common leather bag. This is usually seen dangling about the waist of the laborer or it may be tucked away beneath his home-woven head covering. At any rate he has the all-important leaf about his person and three or four times a day labor must be suspended for "chacchar" or "acullicar," as the chewing of coca is locally termed. The actual

method of the native is about as follows: The branches or stock of the leaves are removed by rubbing in the palms of the hands, the fine leaves are then put into the mouth and chewed into a ball; then a small quantity of lime or ashes is added to give the desired relish. During the course of a day 2 or 3 ounces of coca may be consumed, the amount of course depending upon many things, such as the degree of exertion, the distance traveled, etc.

The habitual coca user is often disgusting to the foreigner, for the former bears about his mouth signs of his habit; but to the writer's mind the counterpart is easily found in the tobacco chewer, whose appearance frequently is not above that of the coca devotee. The latter has another characteristic, and that is the puffed or enlarged cheek, very noticeable to the stranger; this is caused by long and continued use of the coca quid within the jaw, and is known as "piccho."

It is estimated that something like 8,000,000 of the world's people use coca in its natural form, the majority of them being in the Andean region of South America, while millions more partake of its properties in various forms of medicine or beverages. When first taken into the mouth the leaves cause a tingling sensation of the tongue and membranes of the throat, and as the so-called relish of unslackened lime or any of the several varieties of ashes are introduced the sensation is still more pronounced. The leaves have a definite action upon the membranes of the stomach and therefore affect the organs of hunger. By the use of the stimulation of coca it is said that a person may go as long as three days with little or no inconvenience. Coca, however, is not a food, as is clearly shown by the loss of weight when existing solely on its stimulation. In small quantities it stimulates the intestinal organs, but when consumed in vast quantities it appears to have a somewhat paralyzing effect; judging by many extremely aged persons whom one meets when sojourning in lands where coca is generally used, it would appear there are other agencies counteracting such effect.

Travelers unfamiliar with coca, on visiting sections where it is consumed, find their physical powers greatly increased by partaking of the leaves. Shortly thereafter an exhilarating effect is felt and one's hunger seems to have departed, and he is ready for any physical exertion.

Dr. Nicolas Monardes, a physician, of Seville, by his writings in 1565 first acquainted European peoples with a knowledge of coca; but it remained for a Frenchman to popularize the plant by producing from its leaves a beverage which has had an extensive sale.

The effects of coca and its various products upon the human system have long been the subject of study and investigation, and diversity of opinion still exists. Dr. Valdez in 1844, writing about

coca, said: "The native is very voracious and loses his strength when abstaining from the leaves. With a handful of roasted corn and only coca he will travel a hundred miles afoot, keeping pace with a horse or mule." An English botanist, Dr. R. Spruce, who went to South America in 1849 and spent 10 years in scientific study of the Amazon flora, said that a native could travel two or three days without sleep and with no more food than tapioca, ashes of imbamba, and coca leaves.

In science, art, or politics the opinions of the deepest thinkers and investigators widely differ. Seventeen years ago a prominent medical writer began a series of coca investigations. In three years 10,000 letters were sent to as many practicing physicians and medical professors throughout the United States. The object was to obtain the opinions of these physicians as to the effects of coca and its products upon the human system as observed in their practice.

Of the total number of physicians addressed only 1,206 responded. Of the latter number 44 had failed to observe any noticeable effects, while many others had never used any product of coca in their practice; 167 had not noticed any tendency to the formation of a "habit" from the use of coca, while 21 had observed such tendency; 58 reported that it improved sleep, while 30 observed that its use prevented sleep; 58 reported stimulated nerves, and 21 saw the opposite effect; 27 noted that it diminished, while 113 reported that its use increased, the appetite; 109 said it stimulated the mind, while 3 claimed it caused depression; 276 observers specified the form of coca used and gave many other details which added considerably to our knowledge of the effects of coca in its various forms.

Like many other plants and drugs, coca may be a blessing or a curse. Several years ago the United States Department of Agriculture prepared a pamphlet on "Habit-Forming Agents," in which the products of coca leaves, among those of other plants, are condemned. The pamphlet, however, refers more particularly to the indiscriminate use and sale of coca and other extracts which it is claimed is a menace to public welfare.

Whatever favor or disfavor with which the scientific world looks upon coca, the fact remains that some of its products have become a practical necessity for the human family. What a blessing, thinks the sufferer who goes to the surgeon, and his applications of cocaine reduce the agonies of knife or instrument to a minimum. Indeed, the uses of cocaine in countless minor and even major operations have made its service invaluable both to the unfortunate sufferer and the skilled hand of the specialist. Possibly other agencies might be employed, but the product of the little coca leaf has its own peculiar place in relieving humanity of a vast amount of suffering. Intemperance in anything may cause ruin, but rightly directed a most dangerous substance becomes a powerful agency for doing good.

What has been the result of the long use of coca by the Andean natives? We have seen how general is the use of leaves by the lower classes, but can anyone say whether their station or condition would to-day be altered or improved had the coca plant never been grown?

Dr. W. Golden Mortimer, who spent four years in investigating coca and its influence, and whose voluminous work recording his observations was published in 1891, says:

As to the value of coca, there can not be the slightest doubt. * * * The evils from cocaine have arisen from its pernicious use, in unguarded doses, where used hypodermically or locally for anesthesia, when an excessive dose has often been administered, without estimating the amount of alkaloid that would be absorbed, and which might result in systemic symptoms.

* * * * *
Indeed, our knowledge of it is yet in its infancy, and if the present writing will but excite others to continue these investigations and experiments, coca will achieve the position it should maintain as an aid and support to humanity worthy the greatest popularity and the highest respect.

Within comparatively recent years the ancient homeland of the Incas has been invaded by a more advanced civilization; the former capital of Inca glory, Cuzeo, has been united by rail with the Pacific coast, but the journey behind the power of steam has never been made as quickly as by the fleet-footed native who apparently had little other than coca leaves to sustain him. The historian, Prescott, tells us that native runners in relays in olden times carried fish from the shores of the Pacific to the imperial tables at Cuzeo in a single day, a distance of several hundred miles.

The present is an age of commerce, and up and down the Andes the man of business is seeking treasures that lie more easily within his reach since modern means of communication are penetrating in many directions. The tourist also has reached the most inland centers and marvels at the wonders presented in nature and in the ruins of primitive man. Of the flora of the land perhaps none will be of more interest than the famous coca plant and a study of its peculiar properties. The question of the little American girl, who, on reaching the Lake Titicaca region, asked her mother, "Why do the men in the mountains have such big jaws?" is typical of others that will be only a prelude to a further study of the plant called "divine," and from which even greater marvels may be produced.



A COMMERCIAL TRAVELER IN SOUTH AMERICA¹ :: ::

BUENOS AIRES.

DEAR MR. EDITOR: All the way to Mendoza, from which I wrote my last letter, and from Mendoza to Buenos Aires, I was studying some recently issued reports of foreign commerce of three of the west coast Republics. I worked at it a little differently from what may be your own system, but you see I am on the inside down here, and you up there must necessarily treat the matter in the Bulletin in an impartial and neutral way. I gain considerable practical information by studying such figures at first hand, as I can apply what I find out (or think I have found out) in my daily routine, and if there is an error in my estimates it soon shows itself. Let me illustrate by examples what I mean:

Supposing I am selling pianos—which I am not, but I met a man who has been figuring on the proposition—I take up the annual report of one country and discover that in the article of piano players 77 came into the country at one port and only 1 at another. Of these 77, 1 came from Great Britain, 54 from Germany, and 23 from the United States. Evidently a good market for the instrument, but manufacturers in the United States must be more active if they wish to increase their foreign sales. Or, take the article labeled *relojes*, which in this case means clocks; of practically 70,000 imported, Germany sold a few over 56,000; France, 1,625; Great Britain, 1,140; Belgium, 1,120; Switzerland only 108; and the United States about 9,660. A pretty good showing, for probably most of them were alarm clocks, and I know that the alarm clock from North America is one of the treasured possessions of a house in Central America, but I should think that, seeing what Germany does, there is a chance to sell many more in this country. Then, in *relojes*, meaning watches, about 30,000 (gold, silver, and metal) were imported during one year. France leads here, with almost 8,700; Germany follows, with over 5,600; Switzerland, with nearly 5,500; Great Britain, not quite 1,300; Belgium, 1,650; while the United States sold over 3,300, about two-thirds being of metal. Whether there is a larger market for watches I do not know. I use this illustration to indicate one way of studying the purchasing power of a country, and the source of supply of any class of goods, and draw conclusions from such figures.

¹ The fifth of a series of 10 articles commencing in the January number of the BULLETIN.

One thing must not be deduced from these tables, Mr. Editor, and that is that because the purchases of any one article in any given year are small it must necessarily follow that the purchasing power is correspondingly limited. Only careful experience on the ground can possibly warrant that discouraging conclusion. I would not dare to be so emphatic were it not that I have just met a commercial traveler who has made a success in selling a certain article in a certain country. When he went there first, he was told that it was folly to try to sell his product; that there was no demand for it, the people didn't need it, and nobody would buy it. He felt pretty blue, and actually told the *clientes* (customers) he expected to find, to take plenty of samples and give them away. The result was astonishing. Where before there had not been any, he made a market. These beneficiaries of his discouragement learned to know his goods and to like them; they came back for more; and now, so he tells me, he has a steady sale in that region, and he visits the merchants chiefly to take fresh orders and to see that the purchasers are pleased with what they get.

I do not deny that this may be an exceptional case, but I can vouch for its truth. If it has been the result in one instance, it may happen again, and if the manufacturer can stand the cost of such an experiment, I rather think that in other cases, even where there is already a market for goods of a similar nature, a similar temptation could not be totally resisted. Certainly it is done time and time again in the United States, and I know that it would cost more to do it here in South America, but human nature is human nature quite as much among the Aymarás of Bolivia as among the sturdy German stock of mid-Wisconsin. Mind you, I am not advocating the plan as a rule of trade, but I see no harm in suggesting it for the other fellow who will know how to work it to the advantage of all concerned.

But let me get back to my illustrations in the foreign commerce. Here is an article that interested me greatly. Hats, *sombreros*, of two classes. I find that one country imported about 500,000 *sombreros*, of wool (for men and boys) during the year. Great Britain sold around 53,000; Germany, 145,000; France, 43,000; Italy, 243,000; Spain, Switzerland, and even Japan furnished some, while the United States supplied only 575 out of the total. Surely a good article of felt hat is made in the United States, but the manufacturer either can not or will not compete with European styles, I don't know which. Again, take straw hats (*sombreros de paja*). Of this kind, the importation amounted to about 275,000, of which Great Britain sold over 61,000; France, 96,000; Italy, 77,000; Germany, 31,000, and the United States only 48. The hat man ought to be able to add three ciphers to the right of this 48, if he wishes to work for it, but if no personal effort is made in this direction there is no

good of our talking about foreign trade. Take—in another country this time—ordinary steel knives. During one year there were imported about 34,000 dozen, of which almost 10,500 came from Great Britain, 18,000 from Germany, while Belgium, France, and the United States each supplied something less than 2,000 of the total. How they got there I do not know, yet it does not seem probable that the market is so exhausted but that a personal study of the situation by a man on the spot would yield better results.

There is one point, however, which must always be remembered, and which I have already noted. South America is not an entity, but an aggregate of 10 Republics. The continent is big, most of the countries are big, and to give satisfaction business must be done on a large scale. It may never pay the little man to extend his trade to the west coast, even taking into consideration the changes to be effected by the canal. Then he should keep away, being, however, his own best judge of whether or not he is to be called big or little. Even the man or company manufacturing his hundred thousand articles a year may find but insignificant sales the first time his representative tackles the market, but if there is courage enough to plant the seed and to keep on cultivating it year after year, a reward will come to him, directly or indirectly. Ask anyone who knows this field well, Mr. Editor; if my advice is misleading according to his experiences, please cut out this paragraph, and ascribe my optimism rather to my imagination than to my judgment. Of course I can not pretend to work out the details of the problem, such as special requirements in style, finish, or adaptability to local use, freight charges, and credits. These may differ with each article to be sold. I dare to say, nevertheless, that in the matter of customs tariff no one need worry about the amount of duties to be paid. These west-coast Republics have no tariffs that discriminate against or in favor of importations from foreign countries, so that goods manufactured in France, or Germany, or England, or the United States all pay the same duties on passing through their custom-houses. Therefore one great question only is to be considered. Can the manufacturer sell—taking into account the cost of transportation from the United States port of exit to the local South American port of entry—his product, once it has been favorably noticed by the intending customer, at a price to be compared favorably to that of his competitor? Everything else must be subordinate to this essential factor. This cost of transportation is a delicate matter to discuss, but if I think I have any statements to make on that score, I shall take it up as I get further along and acquire more experience.

I said in the first paragraph of this letter that I got a lot of information from studying these reports in the original, and later on I

tried to explain what I learned in regard to character and amount of goods imported. I mentioned specifically that pianos came into one country through only one port. This told me that the port indicated practically monopolized the piano business, and I can understand that such a seeming luxury is best handled at one place. Now, the case is different in the matter of the hats and the cutlery. These importations are credited to all the ports along the coast. Naturally the larger cities purchase the most, but even small places absorb quite a quantity. The plain lesson, therefore, is that the retail trade is brisk at all places on the map. The only way to follow it up must be to make a personal visit to the hat dealer or importer to find out what sort of article he prefers as a regular seller. This rule will hold good in almost everything specified in these reports of annual commerce issued by the various countries, and a little attention to them, livening the apparently dead figures with an interpretation *ad hominem*, will often result in benefit and perhaps turn discouragement, based upon the statements of those not vitally informed, into a gratifying victory.

Of course, being down here, I have had the advantage of being able to make use of these commerce tables as soon as they came out. This is not possible for the manufacturer or selling agent up home, but he can find an admirable substitute in the publications of your own Bulletin of the Pan American Union, which present a résumé of the official reports of the foreign commerce of each country. If you will let me say so, Mr. Editor, they are the best analyses in English of these important subjects. I always compare them with the original, and never fail to find additional items of interest in them. For the exporter they throw a deal of light upon the details of his business, and I have suggested to many of my friends that they be kept on permanent file.

There may be one disappointing feature in the commercial tables, however, which leaves them far from complete. In not a few countries the groups and classifications are altogether too diffuse, specific articles being lost in generalities. For instance, I happened to be interested in the amount of firearms imported into a certain country, where there would seem to be an opening for the sale of the better quality of instrument. The amount of firearms was given, as well as the ports through which the importations were made, but when I tried to distinguish between rifles, shot guns, and revolvers I was stumped. All were under the same head. There was no official printed table that would help me, so I was compelled to go to the customhouse and make personal inquiry, and then to a large importer who keeps careful note of such matters, before I could reach an approximate conclusion on the point. Year by year, so the statistical authorities told me, complaint on this score is less pertinent,

because the details of commerce are becoming better systematized. Until perfection is nearly reached, nevertheless, the exporter from the United States must occasionally run across these vexing problems, and he must then solve them, if he can, apart from the reports of foreign commerce. Private houses frequently make out tables on this order, but they usually keep them exclusively for their own use.

It's hard to break away from these experiences, for they represent so much to me, and they agree in the main so closely to what my friends I meet on the road tell me are their experiences also, but I think it time to get back to the personal narrative again.

From Santiago, after I had returned to that place from the south, I came across the Andes by the tunnel into Argentina. I mention this as in taking the railway I learned a good reason for leaving home toward the end of August for this tour of South America. It allowed me to end in Chile about Christmas, the midsummer season of these latitudes, when the tunnel through the Andes and the railway on either slope was almost certain to be free from snow. At present there is no other commercially available pass over the mountains, those farther to the south, across the lakes I mentioned in my last letter, being as yet used only by pack animals, although it will not be long now, so I am told on good authority, before a railway will be opened. Conditions being as they are, however, there is always a danger that during the winter season (May to October, at least) the snow will delay if it does not actually block traffic. In that case the traveler will be obliged to take the longer route between Chile and Argentina, by the steamer from Valparaiso through the Strait of Magellan to Buenos Aires, a matter of about 10 days. This is a beautiful trip, the guidebooks say, and enjoyed by tourists, but a commercial traveler can put in his time to more profitable advantage by taking the railway. To be sure Punta Arenas is on the steamer itinerary, and I have heard that it is a brisk commercial town, but I can not speak from experience, and must therefore leave that point for others to decide.

I had scarcely gotten well started toward the east coast when I heard my first bit of gossip to the effect that the cost of living was somewhat higher on the Atlantic than that on the Pacific side of South America. My own short time here in Buenos Aires goes to prove that statement, but I think that before I attempt details in that regard I should give an epitome of my expenses from Panama up to the moment I reached Mendoza, which may be called the threshold of Argentina. After careful inquiry I decided to purchase a round-trip ticket from New York to New York, across the Isthmus, down the west coast to Valparaiso, over the Andes to Buenos Aires, and thence northward via Rio de Janeiro to the starting point. This cost me \$505 gold, was good for two years, gave me the option of the

Trans-Andine Railway or the Strait of Magellan, and the privilege of returning via Europe, if I might so desire at the end. Now, this \$505 is paid and done for. I take no account of it in my daily expenses. It covered my direct transportation and nothing more, but it brought me to many of the places I wished to visit, and the company was liberal enough to arrange for such stops as were necessary to my purpose, so that I could make all the side trips necessary and take up my route wherever I pleased. Tips, smoking-room indulgences, landing fees (which amount to quite a sum in the end, I assure you, seldom less than \$2.50 by the time I had reached the dock and was free from the *fletros* (boatmen)), and all similar extras I reckon as daily expenses.

From the day I left New York to the day I reached Mendoza it was just 15 weeks, and I had spent a trifle over \$861, counting a sovereign as \$5 and making no allowance for the moderate cost of the purchase of the travelers' checks. (Please remember that the round-trip ticket is additional to this sum.) This makes my daily average almost exactly \$8.21. I had had railway fares in Ecuador and in Peru; I had gone up to La Paz in Bolivia and down to the coast again, which expenses are included in my daily accounts. I had taken a good room at the best hotel in every place visited, and had ordered wine or beer or mineral water at my meals with moderation but with regularity. I had hired carriages or taxicabs whenever it was indicated by the etiquette of the occasion or when time would be saved by so doing, and I have already found that here in South America the cities are noticeably larger than in Central America, and that therefore carriage hire plays a more important item in the expense account. I had been many an evening to the theater or cinematograph. (Cinemas, they are called, and are so popular that I did not stay a night in any town, however small, without finding at least one public place given to a cinema, and in some towns of not more than 15,000 there would be even two. They present good films, as a rule, chiefly from European producers, the popular exhibits from the United States being Wild West scenes with adventure.) I had entertained in a small way, inviting business or official acquaintances, sometimes with members of their families, to dinner, or to a theater in the evening. I had purchased a trinket or so for the home folks. All this implies that I had lived as a gentleman should, with proper comforts and attention to the niceties of life, but without indulgence in any luxuries that would unduly swell my expense account.

No one who understands conditions here can logically call this daily average, extravagance. I know a man who covers this territory and whose house allows him, outside of his steamer fares, a lump sum of \$12 a day, and he is by no means a spender. He carries a larger equipment of samples than I do, and this in itself increases his fixed

charges, but apart from that he simply lives up to the reputation he has established for his firm, which occupies a dignified position in the United States.

If it should be a question of mere living, decently of course, in a tour of South America, this average is too high. If anyone wants to bet with me, I'll agree to spend as much time as the wager calls for seeing South America, every item of expense excepting steamer tickets, included, at a maximum cost of \$4 gold a day, and at that I'd stay at respectable hotels, engage a carriage once in a while, live in a healthy manner, and in a mere personal sense enjoy myself. But I could not represent a first-class house on that allowance nor attempt to carry that influence which should be the main purpose in sending a commercial traveler into South America. Simple traveling abroad is one thing, but carrying the weight which should represent the forces behind a traveler is quite another. Therefore to try to travel at a less average than what I have given above may save money on occasions, but it is dangerously liable to defeat its own ends, and as the principal reason a commercial traveler exists is to sell goods for the house he represents, if his mind is harassed by the shadow of an expense account he is losing costly time for his employer.

What I have said in the above paragraphs refers altogether to my experiences on the west coast. I have now been three weeks in Buenos Aires, long enough at least to confirm the gossip that living was higher here than on the west coast. But data on the problem as I work it out while I travel northward up the east coast will be given in a later letter. So far, however, I find that many items of the day range rather high here, and I will let it go at that.

Buenos Aires was my first business stop in Argentina, as I followed my rule, in passing through Mendoza, to make for the commercial center or, rather, the capital of a country before beginning a serious campaign into the general possibilities there. If I decide to go back to the northwest region, I shall do so with a much greater and more substantial knowledge of the details of trade than if I had tried to save time by experimenting with a town just because I happened to be there. So here I am in the biggest city in South America, confused and almost overwhelmed by its immensity, its energy, its commercial and financial activity, or what in rather colloquial language may be called the stride of the place.

Argentine money is easy. My first draft at the bank read £10. 648 $\frac{1}{2}$, = 112.75, which means that for 1 sovereign I obtained (4.8 $\frac{1}{2}$ pesos gold) 11.275 pesos paper, or m/n, as it reads in commercial quotations. There are two kinds of money in Argentina. Gold, by which financial transactions are as a rule reported and recorded, and paper, which bears a fixed relation to the gold values. A gold peso

is not coined, the lowest gold piece being an *argentino* of five gold *pesos*, the exact weight of the French 5-franc gold piece, and therefore equal to \$4.8236. I have never heard the gold values of anything quoted, all commercial prices being in terms of the paper (silver) *peso*, which bears a relation to gold at the ratio of 44 *centavos*, or in other words a gold *peso* equals 2.274 silver *pesos*. A gold *peso* therefore equals \$0.9647 of our United States money, while a silver (paper) *peso* equals \$0.4246 of our money. By the time all cost of exchange has been estimated, a rough and ready value to give to the paper money, paper *peso* (in n. moneda nacional, as it is distinguished here) is close to 44 cents United States money. There is seldom any fluctuation, the rate running along about as does that of the sovereign at home, supply and demand furnishing the only excuse for temporary variations.

To attempt to give an idea of Buenos Aires for the tourist, Mr. Editor, would be a useless and unnecessary task for me. The city has been described in books of travel, in guides, in folders of transportation companies, and in innumerable magazine articles. I would refer to any of these for exact information on the city as well as on the country as a whole, and I am sure that the library of the Pan American Union has shelvesful on file, and can give references in plenty to all who wish to read about the Republic and its capital. Its commercial and industrial resources also are well known, and its increasing production of the agricultural staples of life has of late attracted such attention that no one can remain ignorant of Argentina's place in the world's progress.

Much of the spirit of this Republic I thought I had understood before I reached here, but one has to learn it all over again, when actually on the spot.

If I may venture a comparison, Buenos Aires strikes me as Chicago, London, and Paris molten into one. The nervous quickness of the North American city is there; the steady energy with assurance of power, so characteristic of the English metropolis, is there; while the sprightliness, the vivacity of the center of the Latin world, is ever present in good measure. Sometimes one hears the expression "Little Paris" applied to Buenos Aires, but I prefer to consider it as more sturdily American, and with no real imitation of the European. In many material conditions, such as straight, broad streets, clean road beds, symmetrical building line, or popular parks, it has adopted the best methods from the other side of the Atlantic, and deserves much praise therefor, because Buenos Aires shames the North American city in its civic housekeeping. But in spite of the fact that it is the nation's capital, and as such has a political and diplomatic significance, it makes on the eye and mind of a commercial traveler like myself the unalterable impression of a great, powerful, even masterful commercial center, where forces are constantly creative.

I was just on the point of going somewhat into detail on their commercial figures, when I ran across your BULLETIN for July, 1913, in which is given a very elaborate résumé, in English, of the foreign trade of the Argentine Republic for 1912. I feel scarcely justified, therefore, in attempting any amateur analysis of my own, but I do most emphatically advise others to consult that BULLETIN (I find that the annual trade reports of the other Latin American Republics are following, in later BULLETINS) to get a comprehensive idea of the complex commerce of this region.

Nearly everything imaginable is bought by Argentina. Consequently nearly everything can be sold here. The method and the amount are the chief questions. Let me tell as an anecdote a case that came under my personal knowledge, to illustrate my meaning. A man from "The States" had a specialty which was sold more by house to house solicitation than in any other way. He came to "B. A." (the popular English term for the city) on a venture, and was at once discouraged by old timers here. "You can't sell that article," many of them said, "nor in that way. You must have an agent, and advertise it, or have a wholesaler handle it," etc., as so much advice usually runs. He was in despair. Fortunately he had funds, so that he had not committed the unpardonable sin of wandering so far from home on the uncertain chances of making good on the gamble, but he did not wish to go back a failure, nor to give away his stock in trade. He therefore went persistently to work to learn a little Spanish. When he could talk the rudiments of the language and had learned the simple phrases necessary to explain the attractions of his article, he set out into this unknown territory to solicit the dollars from a people who had seldom before been approached in this direct fashion. He went literally from house to house like a peddler or a book agent. And he succeeded. The very fact of the novel method of selling, the actual worth of the article he offered for sale, and which had never been explained to the simple householder in this part of the world, found him a profitable market where others had not even thought to look for it. When I saw him last, he was on his way back to the factory to order a fresh supply, modified and improved by his hard gained knowledge of local conditions, and he was enthusiastic about the purchasing power of Argentina.

Do not let the success of this venturesome individual mislead others into blindly believing that any old thing can be sold in Buenos Aires. That is the greatest mistake a commercial traveler can possibly fall into. Argentinos—and this applies to all South Americans in principle—want the best. They are not secondhanders. A cheap article, if it is good, of course meets their approval, but while an article may be cheap it must be good, or it will soon be detected for its lower

value, and thereafter its chances for steady selling become poorer with every fresh display of it. This man had a good article, he had faith in it, he knew how to present it, and he sold it because he gave value for the money. That's the only rule by which to be guided. If any manufacturer purposes to send his agent to Buenos Aires or the Argentine, he must have no other thought in mind but the excellence of his product, the quantity he must sell in order to make money by establishing a market so far from his base, and then the determination to stick to it if in his agent's judgment the field is promising. Whether there exists a market only the goods and experience will decide. But—and this also is an important point—the agent must be supplied with funds sufficient to take him home again, even if not one cent's worth of sales can be placed on his order book.

Plenty of men fail in Buenos Aires, too, after the initial step toward success has been taken, because they do not give their business personal attention. They think that when once it is started it will continue of its own momentum. They therefore leave an agency here, continue their own prosecution of the business by correspondence and catalogues at the home end, and think that everything necessary has been done. Surely no business in the United States is kept alive in that manner. Why should it be different 6,000 miles away, and in a country where competition is as keen as it is anywhere on earth? To hang on to customers once secured, it is imperative to keep in close touch with them, so my own observation teaches me and so my acquaintances here repeatedly tell me, and so I will report to my firm when I get back. But, I wonder, shall I be any better than the majority of my fellow travelers, when once I am back? Central America never seemed far away to me, however isolated I might be from the railway or steamer, but in this big, progressive, hustling, bustling city, where the whole world has its commercial representatives, and where the Yankee feels only one among very many, I somehow lose my identity. Probably a confession of the same experience will come from others, if they have a chance to betray themselves as I am doing.

Now I must get down to more practical affairs if I am to keep in your good graces, Mr. Editor. Yet it seems to me an almost hopeless task to try to describe the cosmopolitanism of Buenos Aires or to give an idea of the conduct best suited to produce the results imagined and desired by the commercial traveler. In the first place, it is the center of financial and commercial life of the Republic, and almost the only railway port of exit for the immense foreign commerce of the country. Means of orientating one's self are here comparable to what is customary in our own large cities. There are fine banks, a commercial agency (Dun's), directories of numerous kinds, modern newspapers, liberal advertising, and similar means of finding about

all that may be needed to plan a line of campaign. All advice required can be obtained by the mere asking for it, or by purchase, if details appear to be so complicated that professional service is thought best. In other words, Buenos Aires is New York or London, Paris or Madrid, according to the way it is approached. And there you are, as Mr. Dooley says. I can't do any better, by pages more of writing, unless I should go into details which would bore the majority of your readers, although in a few minor points I might hit upon an item or so that would deeply interest an individual here and there. The average commercial traveler must plunge in, unafraid. He will get out of his depth, as I did, at first, and may be tempted to swim for the shore, to go home. But just about when that time comes, he should begin to touch bottom. He will begin to realize either that his business is not big enough to carry on a successful campaign here, or that with sufficient capital, persistent representation and unfaltering confidence restricted only by the size of his bank account, he will finally land, and have a foreign trade established.

In my confessedly short term of observation here, I do not find that there is any well-marked or influential prejudice in favor of goods from one country or another. France seems to control the styles in many things, for the people are, after all, Latin and follow French fashions, but I can not see that this goes beyond a habit. Given a superior article from outside of France, and Buenos Aires will purchase it so long as it remains superior. England, with its billion-dollar investments here, naturally exercises a tremendous power, but a Yankee product will sell if it will better accomplish the work for which it is sold.

But, while I may have said too little to satisfy him who proposes to have a try at the Argentina market but who so eagerly seeks every scrap of information with which to prepare himself, yet there is a greater danger that I may say too much in generalization, and thereby mislead the very individual I hope to help. There is no royal road to success in the Buenos Aires market, of that I am convinced. Courage, confidence, and caution is the alliterative and the best rule. Ignorance, with the determination to find out for oneself, is probably better than secondhand knowledge that can not in all cases be personally applied. Remember that Buenos Aires is a modern, progressive, commercial city. There are few traditions existent. Trade is open to all the world. The people want only the best, and in the long run will be satisfied with nothing else. It is a competitive struggle to get in, and a still fiercer struggle to hang on, but its worth the game, so I believe, to the manufacturer with ambition for it. Therefore, say I, come and have a try at it.

LATER—BUENOS AIRES AGAIN.

I have just returned from as comprehensive a trip as I dared to make through the interior and to the other cities of the Republic. I once more convinced myself of the common sense of the course I have always hitherto adopted, of visiting the interior only after I knew the capital, and in Argentina this advice is doubly valuable. The traveler must know Buenos Aires before he is qualified to cover the other cities. Let me name those I have found of most importance for myself, merely as a hint to others who may have confidence in my opinion. La Plata is only a few miles (33 miles, 52.6 kilometers) south and can be made by going back and forth from Buenos Aires without considering it as apart from that city. It is the capital of the Province of Buenos Aires, has fine public buildings, a university, and is of commercial importance as a coming port to relieve the congested traffic of Buenos Aires. It is worth a visit by the representative of certain lines. By all means go to Bahia Blanca. This is the busiest port south of Buenos Aires, has about 50,000 inhabitants, is growing rapidly, and is in close touch with a rich agricultural area which seems to have no limit as far as productivity is concerned. To Bahia Blanca there is direct train service of 15 hours (640 kilometers), 400 miles, with excellent sleeping cars, a diner, and all such luxuries. It will astonish the northern traveler to note the activity of the place.

When I stated that Buenos Aires was the great port of foreign commerce in the Argentine Republic, I purposely left for this part of the program, proper mention of Bahia Blanca above, which is developing in the south a commerce of its own; and in the north, on the Parana River—the upper stream of the River Plate--of Rosario, which has a history running back to 1725. It is the city next in size to Buenos Aires, having a population of 200,000, and may be compared to Chicago, in its importance on the grain market of the country. Rosario may be reached by direct train from Bahia Blanca, but it would be better to come back to Buenos Aires, where a fast train can be taken, making the distance of 188 miles (303 kilometers) in practically five hours. These two cities must be visited if justice is to be done to Argentina, but I do not like to omit mention of others, although the advantage in calling on them depends upon the class of goods the particular traveler has to sell. In the distant interior are Mendoza, with 40,000 or more, a great wine district; Cordoba, 100,000, and Tucuman, about 70,000, both northwest and consequently in rich agricultural districts; while up the river are Santa Fe with 50,000 and Corrientes with about 25,000 inhabitants. All these, and even many more cities, are worth visiting, if indications given at Buenos Aires are strong enough.

JONAS LIE'S PAINTINGS OF THE PANAMA CANAL ::

LABOR made dramatic in terms of art is a fitting phrase in which to describe the paintings of the Panama Canal by Jonas Lie, on exhibition at the Pan American Union from Monday, April 6, until Saturday, April 25, inclusive. Many accurate photographs of the canal in all its aspects have been made officially for the Isthmian Canal Commission; many more photographs by real artists with the camera have been taken for private collections or for publications. Sketches have been drawn in water colors and pen and ink, while some beautiful etchings have been recently published in some of the art magazines. But Jonas Lie is the first to attempt to reveal on the true canvas with oil the titanic character of the work on the Panama Canal.

Expressions of the critics are unanimous on the artistic inspiration with which Mr. Lie has carried out his work. Realistic such work must be, says one critic, in order to express the immense forces to be seen on the canal, but the artist reveals his spiritual nature in all that he attempts. None but a real artist could have evolved such a vision as that of "The Heavenly Host," a scene in which, against a powerfully painted sky of fleecy clouds, the great iron buckets dance in mid-air, with nothing visible but their cables. As a contrast to this aerial labor is seen below the enormous floor of the canal itself, still occupied by the engines of toil, but almost ready to receive the waters they are ultimately to let into it. A real painter, another critic declares, has returned from the Isthmus with pictures that convey a genuine sense of the vastness and the splendor of the undertaking there. Again, it is worth remarking, many pictures of human toil have glorified the man rather than the work, but in these paintings the gigantic effects of the result unavoidably throw man into shadow, for it is the work that counts. Two qualities stand out—the artist's dramatic interpretation of industrial activity, and his fine sense of color, which have led him to express beauty where many another might have expressed only strength. So much for the purely artistic side of these paintings by Lie. There is an added value to them, however, in that they have preserved in color, such views as that of the unfinished Culebra Cut, the unfinished Gatun Locks from the depths of the canal, and the mighty engines at work, which can never be seen again. It is gratifying to note

that this exhibition has been attended by crowds of art lovers, of those interested in all features of the Panama Canal, and of all, in fact, who follow the efforts of the Pan American Union to call attention to the big things on the Western Hemisphere. The Hall of the Americas seems a most fitting place for such an exhibition. Mr. Lie is an American, and although of Norwegian and American parentage, he is properly claimed by the United States as its own, especially since the presentation of these pictures. He is an associate of the National Academy of Design. Like many another artist, Lie received his first inspiration from the Brooklyn Bridge and the monster buildings in our cities.

PANAMA'S NEW RAILWAY

IN the BULLETIN for October, 1913, mention was made of the agricultural development in the Republic of Panama, and the encouragement given by the Government toward that end. The projects for railway expansion were there examined, and a description of the western areas of the country was given. It is gratifying, therefore, to supplement that article by more definite news of progress, which will be of decided value to all the Republic, because what is accomplished even in the west is bound to influence the entire interior, and thus bring it into closer touch with the main line of commerce and travel across the Isthmus.

On April 4 the President and a party of 60 officials and other citizens of the Republic of Panama, who had left the capital a few days before, were present at the formal beginning of construction on the railway to connect the upper (northern) part of the Province of Chiriquí with the port of Pedregal, on the Pacific. This means the inauguration in Panama of a policy which will be of permanent influence for material good. When the productive activity of this region becomes recognized, it will be only a short time before other portions of the country also must be opened.

A brief statement of this railway under construction and of some of the details of the work will not be amiss at this time. On February 4 (1914) the secretary of public works of the Republic of Panama let a contract for the construction and equipment of a 3-foot gauge steam railway in the Province of Chiriquí. The line is to extend from Pedregal, on the Pacific, to David, 10 miles up the estuary; thence to Boquete, near the Chiriquí Volcano, one of the highest peaks in Panama; and from David a branch westward to La Concepción.

cion of 20 miles. In all the new line will be about 52 miles in length. The highest point to be reached is about 4,000 feet above sea level. Construction must be completed by May 1, 1916. The maximum force to be employed is estimated at about 2,000 men, of which many will be, it is hoped, from among the laborers released by the Canal Commission as the canal draws to a close. The Government of Panama, it may incidentally be noted, will attempt to colonize these men in the district through which the railway is to run. It is anticipated also that a great part of the necessary material and equipment can be purchased from the retired and surplus supplies on the Isthmus, the availability of this relatively cheap material being one of the deciding factors in the immediate undertaking of the work. The cost of the project is estimated at approximately \$1,600,000 (gold). The contract provides that the contractor be paid in bonds of the Government of Panama, and he will receive 5 per cent of the cost up to \$1,600,000, with a bonus of 50 per cent of all the saving on this estimate, and a penalty of paying 50 per cent of all cost above the estimate. The contractor is to advance the money for the work, submitting each month a report of expenses for the 30 days preceding, but this amount on approval will be refunded to the contractor in bonds with the stipulated bonus.

These bonds for the construction of this railway have just been placed with banks in New York. They are accepted at 97, and through the offices of Dr. Eusebio A. Morales, minister of Panama in Washington, the negotiation for their disposal has been quietly and very successfully arranged. The President has just congratulated this representative on his mission, and, in fact, as he adds, the Republic is also to be congratulated on this continuous proof of the good credit of its finances in the American market.

To illustrate the alteration of the program for railway development in Panama, it is wise to recall the original scheme, as studied for some time by those desirous to see the country more fully approachable and settled. At first the desire seemed to predominate to build a railway east and west between Panama city and David, so as to attract commerce directly to the capital. This would have been on the theory of an extension of the Pan American Railway, for it was to add a link toward the line already existent in Costa Rica. It seemed, on mature deliberation, that local expansion would not thereby be so permanently stimulated, as would be the case were short lines from the interior to the southern ports of the Republic to be operated. This later plan would develop several foci of production, demand continuous activity along the Pacific coast, and redound in a high degree to the national advantage. The first step is therefore taken, as is shown by the news given in the above paragraph.

PAN AMERICAN NOTES

THE PEACE TREATY WITH VENEZUELA.

Announcement has only recently been made that the peace treaty between the United States and Venezuela has been signed. This makes the fourteenth of the list of similar treaties to be signed under the leadership of Secretary of State Bryan and follows the general lines of the one already signed with the Netherlands. In this agreement no provision is made for the maintenance of the status quo of the Army and Navy during the investigation period, but, like all the peace treaties, it binds the two nations, for the period of one year, not to engage in hostilities until an investigation commission has made a report and submits to such an international commission all questions not capable of settlement by diplomacy.

ANOTHER LINK IN THE PAN AMERICAN RAILWAY.

On the 1st day of March, 1914, the President of Guatemala was informed by telegraph that the last rails had been laid which were needed to complete the connection between the main railway system of the Republic and the smaller and shorter line running into the interior from the Pacific terminus at Ocos. This connection was made at Vado Ancho, where a long bridge with its railway crosses the Naranja River; from Vado Ancho to Ocos the present railway is 23 miles long. At 11 miles from Vado Ancho is the station of Ayutla, from which to the Suchiate River is a distance of only 2 miles, and over this short distance, to the international railway bridge spanning the river already, final connection will soon be made to the southern terminus of the Pan American Railway in Mexico. Thus there remains but a minimum amount of construction yet to be completed before rails will at last be laid from Washington, the capital of the United States, to Guatemala City, the capital of that Republic.

THE COLOMBIAN COMMERCIAL CLUB.

There is now established in New York, at 123 West Ninety-fifth Street, a Colombian Commercial Club, which has for its purpose the bringing about of cooperation and good feeling between the citizens of Colombia and the United States; the promotion by free instruction of a knowledge of the history, language, and commercial possibilities of these countries; and the maintenance of a library of books, periodicals, newspapers, magazines, and other publications relating

to the soil, climate, natural resources and commercial possibilities of both. The club arranged a lecture on March 29 by the Hon. James T. Du Bois, former American minister to Colombia, who spoke at the Berkeley Theater, 19 West Forty-fourth Street, on the Republic of Colombia, basing his talk on his own personal experiences there.

A NATIONAL FOREIGN TRADE CONVENTION.

On May 27-28, 1914, there is to be held at the Raleigh Hotel, in Washington, a National Foreign Trade Convention, under the auspices of the American Manufacturers' Export Association, the American Asiatic Association, and the Pan American Society, assisted by other leading commercial organizations in the country interested in the promotion and development of foreign trade. The purpose of the convention is to give expression to the views of men representing the productive activities of the country in regard to the more effective promotion of the commerce of the United States in the markets of the world. Among these markets will of course be included all to be found within the area of Latin America, and in fact especial attention is to be given them. As an evidence of their importance, the Pan American Society of the United States, as above noted, authorized by its executive committee, will take an active part in the work of the convention. Invitations have already been sent to many prominent business men and manufacturers by the general committee, of which Mr. Lloyd C. Griscom is the chairman and Mr. E. V. Douglass the secretary, 66 Broadway, New York City. An invitation is extended also to those interested in this convention by the secretary of the Pan American Society, through Mr. Frederic Brown, 15 Broad Street, New York City.

SENATOR ROOT'S THANKS TO DR. MÜLLER.

It has already been mentioned in the BULLETIN that Mr. Robert Bacon went last year to South America as the envoy of the Carnegie Peace Endowment, and returned full of enthusiasm for the reception given him and the delightful hospitality extended to his party on every side. Senator Root, with his earnest desire to show the appreciation of the people of the United States, of the Peace Endowment, and of himself for these courtesies, has written to Dr. Lauro Müller a letter of thanks which sympathetically explains its purpose. In it he says that all who have the good of the world at heart are anxious to promote the activities of the Peace Endowment not only in the United States and Europe but also in Brazil and other parts of Latin America as well. The interest shown in Brazil, therefore, in promoting the Institute of International Law in that country is a matter of pride and congratulation.

A LIBRARY ON ARGENTINA.

The Museo Social Argentino (Social Museum of Argentina) is to present to Col. Theodore Roosevelt an exclusively Argentine library, the books and other matter to be selected for the purpose upon the recommendation of the board of directors of that institution. The library is intended to offer the recipient complete first-hand information concerning the Argentine Republic for use in such articles as he may prepare on that country. There will be more than 1,000 volumes, together with numerous maps and photographs. Sr. Alejandro Guastavino has been commissioned to go to the United States to present the library to Col. Roosevelt in the name of the museum.

THE MANUFACTURERS' ASSOCIATION OF ILLINOIS IN SOUTH AMERICA.

The members of this association have, as is already known to readers of the BULLETIN, been making a visit to South America, and the Mercurio of Valparaiso, Chile, on the date of March 17, 1914, gives an extensive notice of their visit to that seaport. Their expressions of opinion, as detailed in several interviews with members of the party, were all most appreciative and sympathetic. They were cordially entertained in the city of Valparaiso, and were especially grateful to the United States minister, Henry P. Fletcher, in Santiago, and to the consul, Alfred A. Winslow, in Valparaiso, for the courtesies received at their hands. Their experiences were but a repetition of their reception in Rio de Janeiro and Buenos Aires, and in fact in all places visited along their route. Letters have been received from the ambassador to Brazil, the consul general at Rio, the consuls at Santos, Buenos Aires, and elsewhere, telling of the gratification of the party at the hospitality extended to them by both officials and business men alike. Newspapers too gave a considerable space to the party as a whole, and to the various members composing it. It is a pleasure to feel that intimacies of this character are growing rapidly year by year.

HARVARD UNIVERSITY AND LATIN AMERICA.

Harvard University has recently received an anonymous endowment for the establishment of a professorship of Latin American history and economics. The income from the endowment will be sufficient for paying salaries of professors, and if there should be any surplus funds remaining, books will be purchased and special lecturers engaged to talk on Latin American topics. The object of the donor is to promote friendly relations between the United States and the Latin American Republics. Dr. Oliveira Lima, of Brazil, has been selected by Harvard as the first to hold this chair.

A TRADE TOUR OF SOUTH AMERICA.

The Pan American Union has received an announcement of the American Trade Tour Co., of New York, which deserves mention. The purpose of the organization is to afford United States manufacturers a practical method of showing the merchants of Latin America the quality of goods made in this country. This plan is to be accomplished by chartering a steamer to make a tour of parts of Latin America, carrying on board a representative body of manufacturers, who will thereby be given opportunity to make exhibits of samples, even to sell immediately from these exhibits what purchasers may wish to buy, and to take orders whenever the dealers in the places visited may consider it to their advantage to give them. The entire accommodation of the steamship *Kroonland* of the International Mercantile Marine Co., about 12,000 tons capacity, is to be given over to the use of the passenger manufacturers, who will live and conduct their business on board for the entire cruise. The itinerary will cover four months, which implies 80 days suitably distributed among the 20 ports at which stops will be made. The course so far outlined is to go first to Habana and Santiago in Cuba, Jamaica, Colon (Panama), and Limon (Costa Rica), then along the north coast of South America, Puerto Colombia, La Guayra, and Trinidad to Para, Brazil; then along the east coast through Pernambuco, Rio de Janeiro, and Montevideo to Buenos Aires, returning via Santos (and São Paulo), Rio again, Bahia, Para, Barbados, and the adjacent islands, Puerto Rico, and finally New York. October 14, 1914, is set as the date of departure, the return being planned toward the middle of February. Further particulars can be obtained from the managing director, Joseph J. Keegan, 15 Maiden Lane, New York City.

TO CONTINUE EXPLORATIONS IN PERU.

The announcement that the National Geographic Society has appropriated \$10,000 for the year 1914 and a similar amount for the year 1915, the funds to be used for further archaeological investigations in Peru, has been enthusiastically received by those who have followed the interesting accounts of previous expeditions to that country. It will be recalled that the Yale Peruvian Expedition of 1911 with Dr. Hiram Bingham at its head did remarkable work in its endeavor to shed light on that obscure period of history which covers the time between Manco Inca's unsuccessful siege of Cuzco in 1536 and the final capture of his grandson, Tupac Amaru, in 1571. Among the accomplishments of this expedition was the location of what is believed to be the last capital of the Incas at Vitcos. The following year, 1912, Dr. Bingham, continued these investigations

under the auspices of the National Geographic Society, and the results have been sufficiently important to warrant the extension of his work by further appropriations.

A LATIN AMERICAN NEWS BUREAU IN PARIS.

Announcement has just been made in the periodical press of Spain that there is about to be established in Paris, to supply the newspapers of Madrid, London, Berlin, and Rome, a news service on American affairs on somewhat different lines than has hitherto been followed. It is acknowledged that all papers depend upon the public for their support, and that this public likes sensational news. Nevertheless, the reading public of the world accepts with eagerness whatever is offered them, provided it has a news value, regardless of the sensationalism to which they are unconsciously accustomed. Therefore this news bureau, under the direction of Sr. D. Enrique Deschamps, has arranged to gather in Paris as headquarters all the news from America (particularly Latin America), and so to edit it that all notes of progress, of reform, of intellectual, social, and material accomplishment, be distributed as above mentioned, supplying trustworthy information of a substantial character, while at the same time preserving its essential news value. Sr. Deschamps is now making arrangements with the various governments of America by which they will give him their hearty moral support, and he already has the promised cooperation of many of the best papers in the territory specified. It is to be hoped that this commendable step in the right direction may meet the support it deserves.

PLANET BOLIVIANA IN THE HEAVENS.

An announcement of interest to astronomers of America has recently been made by the great French student of the heavens, M. Flammarion. The planet discovered by the German astronomer, Wolf, and hitherto known to science as Planet No. 712, has been named by M. Flammarion in honor of the South American hero, Bolivar. On account of the fact that newly discovered planets generally receive a feminine designation, this body will be known as Boliviana. The celestial position of Planet Boliviana is between Mars and Jupiter and has its orbit halfway between the sun and Jupiter.

EDUCATION OUTSIDE OF THE COLLEGE OR UNIVERSITY.

The desire for education is ever present, but it can not always be satisfied. Of late years the needs of an education are growing stronger, and the restrictions upon the person without a technical education are a handicap which in some cases can not be overcome.

Those who are fortunate enough to have taken a complete course in a college or university and have therefore not only an education but a diploma—that is, a degree to show for it—have conquered the first obstacle to success, and the rest of the road lies open before them. But there are unfortunately many others whose brains are as active, whose ambitions as keen, and whose energy as tireless, but who can not go to college because of the essential demand upon them to earn their living from the moment they leave the lower grade school. Various institutions for supplying the deficiency of education or of technical training have been organized. Some fail to offer the instruction they advertise, others do not carry it much beyond the step at which the student left off. Yet young people at work continue to demand some means of increasing and strengthening the knowledge they already have. Among the best of the methods within the reach of practically every one with a purpose is that of correspondence schools. In such a school instruction is given by an exchange of letters between the pupil and the teacher, who must have had such training as will qualify him both for understanding what the pupil wants and for seeing that he gets it by lessons that follow a regular plan yet do not require fixed hours for attendance or for studying them. Some schools have an entire series of textbooks especially prepared for the courses given on all possible subjects which students wish to pursue, and no one can turn away with the feeling that his particular subject is not to be found in the curriculum. The student buys his books, sits at home or at his bench (at whatever work he may be engaged) and solves as best he may the problems put to him in the distant home, testing their conditions (if they happen to be within the world of natural phenomena) by his own actual experiences. Notice is here taken of the correspondence system of supplementary education, because of the many young men going into Latin America who perhaps desire most earnestly to add to their knowledge, and also because of those many young people, residents of all the Republics, who can not come abroad for some particular study, and who might like to know that probably in some such correspondence school their needs will be satisfied. As instruction will be given in other languages besides English this correspondence system ought to find an ample field abroad.

IMPROVED NICARAGUAN FINANCES.

The report for the past year shows a noticeable improvement in the finances of the Republic of Nicaragua. The revenues from the customs collections for 1913 will be upward of \$1,675,000, while internal revenue and miscellaneous items will add fully \$1,000,000 more. This is gathered from the report made by Collector General

of Customs Clifford D. Ham, who is in charge of customs collections and disbursements of Nicaragua, with headquarters at Managua. With such a favorable showing it has been possible to refund the old bonded debt, securing a reduction in the interest rate from 6 per cent to 5 per cent, on terms advantageous to the Republic. All interest and amortization charges have been met, and there has been no difficulty in obtaining a further but very necessary loan, so promising are the finances to-day. The customhouse receipts of Nicaragua have increased materially under Mr. Ham, and even with the increase of 1912 over 1911 the year 1913 will exceed the year before by about 50 per cent. With such added revenues the Government, through Mr. Ham, has purchased three new lighthouses of a modern type, one to be placed at Cabo Gracias, one at Corinto, and one at San Juan del Sur. A fourth new one is promised at Bluefields within a short time. These lights will be visible at sea for a distance of 10 to 15 miles.

THE SPECIAL PAMPHLET ON GUATEMALA.

In the *Diario de Centro-America*, issued in Guatemala City, of Thursday, March 19, 1914, is a pleasant compliment to the *BULLETIN* of the Pan American Union, which, so that daily newspaper says, deserves great credit for the character of its material and the impartiality of its work. The *Diario* then reviews the special publication on Guatemala, issued in August, 1913, praising it for the array of facts on that Republic and quoting several paragraphs in regard thereto. The *BULLETIN* takes the liberty of referring to this notice, because it does make every possible effort to secure accuracy of statement, and commendation from any country on the pamphlet referring especially to that country is a proof of successful accomplishment.

COURTESY OF HARVARD UNIVERSITY TOWARD FOREIGN STUDENTS.

The United States may well be considered as a country in which the youth from other lands can obtain an education, and the increasing popularity of the many institutions of learning here gives proof, if such were needed, of this assertion. To increase this popularity, or rather to facilitate the entrance into its courses of students who, while prepared in the studies that must serve as qualifications for entrance, are not able to express themselves in English, Harvard University has decided to waive, in certain cases, the examination in the English language. It will admit as candidates for a degree those students who bring a certificate stating that the aspirant has completed the courses which would admit him to a university in his own country. Opportunity will also be given to pass examinations in

PAN AMERICA IN THE MAGAZINES : : :

Buenos Aires: A fine modern capital, in the Outlook for March 28, **In the Argentine**, in the April 11 issue, and **On the way to the Andes**, in that of April 18, are the titles of the three latest installments of the South American series being contributed by Col. Theodore Roosevelt, and which have been noted seriatim in the BULLETIN. In these articles the author deals more with the social and economic development of the people of Buenos Aires and Argentina in general than with the specific descriptions of notable places of interest. As have been other observant Americans, the distinguished visitor was greatly impressed with the spirit of progress, the indomitable energy, the high ideals in the social, political, and educational life of the country, as well as with its great strides in commercial lines. His reception by the people in general as well as the courteous hospitality of the high officials made him feel very much at home. Of Buenos Aires he writes:

No one can help being immensely impressed by Buenos Aires. It is one of the typical modern capitals, standing in the list of the great cities of the modern world in company with Vienna and Budapest, Berlin, Paris, London, New York, and Chicago. It has a great future, and the Argentine Republic has a great future.

Buenos Aires is both a charming and a beautiful city. Sometimes unwise admirers call it "The Little Paris." It is never, in my judgment, well to call anything the something of somewhere else; to do so is usually the mark of a provincial mind without self-reliance; but if this kind of comparison is allowable at all, then Buenos Aires should be called, not "The Little Paris," but "The Paris of the New World," for but a few years will go by before it surpasses Paris in population, as it already does in the extent of territory built up within the municipality. Paris has a charm all its own, and it is always unwise for the citizens of any city, also with a charm of its own, to speak as if it were only a copy of an older city, especially so in this case, as in certain vital characteristics the citizens of the new city can well afford to assert that it stands ahead, not only of Paris, but of all the great cities of both Europe and the United States. * * *

Driving around over the immense extent of Buenos Aires I was impressed with the obvious increase in the pleasure of living which its buildings and, above all, the innumerable gardens represented. There are many public parks, most of them still only newly planted. There are also many private gardens. Even the little houses have them, and the back yards are beautifully kept bits of greenery instead of, as is too often the case in our own cities, noisome abominations. The workingmen, the artisans, and the small shopkeepers very frequently, perhaps usually, own their houses. As for the great houses, I was much struck by the wealth and, on the whole, by the taste of their proprietors. I saw houses larger than any in which, as far as I know, any of our own multimillionaires dwell, and, although they were in this great city, they were surrounded by gardens that were beautiful pleasure grounds.

The climate is much milder than with us, and I saw little or no trace of grinding poverty, although, of course, as in any other great city, it is easy enough to find what is vicious, degrading, and unlovely, this equally among the idle poor and the idle rich, especially when the idleness is by preference. The city is excellently cleaned, policed, paved, and lighted.

The city itself and the men whom I met gave a strong impression of power, of energy, of self-confident strength, and of belief in their future. I had come down from New York with the Argentine rifle team, which had just won the world's championship; the army is alert, hardworking, efficient; and the capital naval officers whom I met were evidently well trained, and were eagerly looking forward to the advent of the two great battleships, as formidable as any in the world, which are just being finished in the United States for the Argentine Republic. The men at the head of the Government, and the men generally who are interested in public affairs and are taking the lead in social and industrial movements, were all men of note. In the Argentine Republic there has now been for many years political stability and order and a tremendous industrial development. The nation has already achieved very much and nevertheless has only just begun its career of achievement. The Argentines stand as our full equal; they are a fine and strong people; they have a right to challenge the hearty respect and consideration of every other strong and free people, and to be accepted by every such people on a footing of full equality. As a matter of fact, the Argentine people have a striking likeness to the people of the United States. I was continually impressed by this likeness; it is due partly to similarity in institutions, partly to similarity in physical environment, partly because in each country the people are drawn from the most energetic and self-reliant members of various European States. * * *

Society in the Argentine capital is charming. The women, by the way, can teach certain vital lessons to their sisters in certain other civilized countries both of the Old and the New World. They are high-bred, they are charming, they are beautifully dressed, and they are also admirable wives and mothers. Large families are the rule and not the exception among them. Time after time I was introduced to some woman of the highest social rank and standing, well gowned, charming in manner, attractive, and young looking, and found that she was the mother of six or eight children whom she had borne, whom she had herself nursed; and it had never occurred to her as possible to fail to do her whole duty by them. * * * In the vital point of family growth society is on a more satisfactory basis in most of South America than in many European countries. It is on a more satisfactory basis than in much of the English-speaking world. The men who are the leaders in the governmental, business, and social life of the Argentine Republic are fathers of large families. Large families are the rule in all classes of society. It has been said that these large families exist in Argentina merely because it is a new country, with vast unoccupied spaces yet to fill. The untruth of this statement is made evident by a moment's consideration of the case of Australia. Australia is a newer country than Argentina, with a smaller population, and with vaster spaces still to fill; but the Australian birth rate has sunk to the New England level, which is not much above the French level. It ought not to be, but evidently is, necessary to point out that as a mere question of mathematics, if these tendencies continue unchanged, the end of the twentieth century will see a reversal of the relative positions of the peoples speaking English and the peoples speaking a Latin-American tongue.

The author writes instructively of the commercial enterprise of Buenos Aires, of the lack of appreciation on the part of the business men of the United States of the true situation in regard to the promotion of commerce between them and the merchants of Argentina, and of the port facilities and vast foreign commerce revealed by a

trip along the water front of the great city. He enters into interesting details as to the educational system and the similarity between the work of the public schools and those in the United States, and closes with an account of the charitable and religious institutions he visited.

In the issue of April 11 he deals with his visit to the ranch country, to Rosario, and Tucuman. Of the first he writes:

After leaving Buenos Aires we went for a short trip to the north through the Argentine country. The first day's journey northward on the left bank of the Plata and the Parana was through a rich, fertile country, not unlike eastern Kansas, northern Missouri, and Iowa. We entered the Province of Santa Fe. It is a country, like most of Argentina, of open land, of great ranches. The wealthy ranchmen have built big, handsome houses on their enormous ranches—"enormous" is the right word from a double standpoint. These ranches are large beyond what we of the United States have any conception of and are also too large to be healthy. Many of these houses are delightful in every way, stocked with books and pictures, with all the conveniences of the highest modern civilization, and in the stables are motor cars and blooded animals of every type. The horses, the cattle, the sheep, are all being bred up to a high standard. It is impossible not to like and admire the life on these ranches. Certain of them—I have in mind particularly one which has a frontage for 10 miles on the Atlantic Ocean—offer to the owners the chance of leading a singularly happy existence. * * * In most of the ranch country (not in the sugar-cane country) there is a good immigrant population of permanent settlers; it was fine to see the Spaniards, the Basques, the Italians, the Slavs, who were taking up agricultural land; and the Government ought to take whatever steps are necessary to see that in this new, vast country these potential homemakers are given the chance to get small holdings on which to make their homes and to live as tillers of the soil.

The first city we stopped at outside of Buenos Aires was Rosario. It is a brisk, energetic commercial city of a quarter of a million people, several of whose citizens told me that they regarded it as the Chicago of South America. It certainly has much of the spirit and energy which already marked Chicago's population when Chicago's was only the size that Rosario's now is. It is a shipping port for wheat, corn, and linseed, these being the three products with which its enterprising chamber of commerce especially deals. In the old days it had a small river frontage of wooden docks. It now has 6 miles of stone quays, with grain elevators, places for storage of petroleum, and the like, and its plans are for the construction of 21 miles of these quays, all told. In the chamber of commerce, which included the leading merchants and business men of the city, eleven hundred all told, there were native Argentines, Italians, Germans, Englishmen—all of them, as elsewhere, being merged into the Argentine nation, all contributing not only to the growth of the nation but to the formation of an energetic and powerful national character.

The following day we reached Tucuman. * * * The landscape began to have in it a hint of Louisiana. We were in the subtropical region where the sugar cane is grown. The city of Tucuman itself contains about a hundred thousand inhabitants, and we found it delightful, with a quaint, old-time picturesqueness, but without the drawbacks that render most "quaint and picturesque" Old World cities undesirable to all tourists save those in whom sentimentality overcomes distaste for noisome abominations. Tucuman is clean. It is administered on sound modern principles of hygiene. It is well lighted and well policed. There is a good hotel. As with all these South American cities, the officials and the leaders in the industrial life of the community form a polished and courteous society, to which it is a pleasure to be admitted.

Tucuman is far in the interior in the north of the Argentine Republic, in a region to which fewer immigrants have come than to other parts of the country. The indigenous population has shown a marked industrial development, turning from the old-time gaucho existence of mounted cattle herders into industrious and competent workers, both in the cane fields and in the sugar factories. The natives work, and work hard. Of this the people are justly proud. As the governor remarked to me, "Here is a city on the edge of the Tropics where the white man does not live on the labor of the colored man, but himself does his own manual labor, just as in the United States." It is a fine showing.

Col. Roosevelt visited the various public institutions, libraries, and schools. Especially was he impressed with the great attention paid to education and the progress shown in regard to the education of women. He gives an account of his visits to two of the industrial schools for girls, where all the branches of the domestic arts are taught, and writes:

It is a fine thing to see the way in which the modern educational movement in Argentina has been extended to include the women. Fifty years ago in South America almost nothing was done for women, and their position was one of utter inferiority to the men. Now every effort is being made to give the girl no less than the boy an education, and, as far as I could see, there is not only an intelligent following of what is wise in the methods of education for women in the United States and northern Europe, but also an intelligent avoidance of what is unwise.

Three large sugar plantations were visited, and Col. Roosevelt gives an interesting account of the character of the people employed, the attractive villages in which the employees live, the efficient management of the industries, and many other informative details.

On the way to the Andes, in the April 18 issue, is a continuation of Col. Roosevelt's observations in regard to the interior development of Argentina. The trip included a stop at the old city of Cordoba, where is located the university which is to celebrate its three hundredth anniversary next year. A visit to an agricultural college, also located here, gave an opportunity to investigate the question as to whether or not these institutions are of real benefit to the agricultural sections in training young men for future usefulness as farmers, and the conclusion was reached that they were fulfilling the purposes of their being.

In Cordoba was found a practical demonstration of social betterment work, which appealed strongly to the distinguished visitor and of which he writes as follows:

In Cordoba there is a beautiful park system. It is an attractive city in every way. I was interested by the incidental discovery of a matter worthy of attention of our own students of social betterment. The municipality has recently gone into the business of providing homes for the workingmen who desire to get them. The municipality buys land and constructs the home. It then sells it to the householder on terms that include the repayment by the latter of 8 per cent a year on the purchase price. In 15 years the house and land become absolutely the man's own. An effort is being made to apply the same system to agricultural lands for the purpose of encouraging immigrants to settle down and become owners and tillers of the soil. The proposal

is that in each parish the Government shall purchase some 5,000 acres and sell the land in small lots on terms somewhat similar to those mentioned above to actual settlers who live on and till the soil.

It will be noticed from the above that the Argentinians are thoroughly awake to the need of having small land owners, and also that they have no faith whatsoever in any of the theories that would abolish ownership in property, or even ownership in land. This may be due to the fact that part of the business of the nation in its northern country is even yet that of civilizing the Indian; and almost the worst obstruction to civilizing the Indian is the fact that the Indian actually practices the theories of certain advanced Socialists. The Indians of the Chaco, in practice, have no personal property. The result is that they are all kept at the level of the shiftless, the idle, and the incompetent. In practice it proves to be impossible to elevate them until they are given the chance to have personal property which is not to be shared with the shiftless and idle. Among these Indians applied socialism has simply meant that any property acquired by anybody is shared with the worthless members of the tribe. The result has been the positive refusal of the thrifty and farsighted to go into the business of accumulating goods for their less worthy brothers, so that the entire social life is stagnant. In the Argentine Republic at present, and during the immediate past, it has been proved by actual experience that the only way to get a betterment of social and industrial conditions is to give the average man the chance to get property for himself if he possesses the necessary energy, industry, and thrift, and this means that not only must he be protected against the big man who would exploit him, but that he must also be protected against the small man who is lazy or shiftless or vicious. In practice the possession of property, and the chance to possess property as a result of honest and intelligent toil, offer the chief incentives for the growth of well-being and of civilization.

The stop at Mendoza gives occasion for a graphic description of that inland metropolis, its system of fine parks, its interesting and energetic people, and the following bit of its history:

Mendoza was an old colonial town, and, like Cordoba, had a distinct and characteristic life of its own in the days when each province and provincial city developed by itself out of touch with its neighbors. It was here that San Martín raised the army with which he crossed the Andes and marched northward as far as Chimborazo, clearing the Pacific provinces of the Spaniards. It is difficult to realize how poverty-struck Argentina was in those days. San Martín had no money, no cannon, nothing. Under the lead of a priest cannon were cast. The gauchos rallied round the new standard and were made into the famous horse grenadiers of San Martín. The very poor contributed even out of their poverty. Mules were furnished by the thousand for transport, and the young girls of Mendoza wove the first Argentine national flag. This national flag is preserved, as it ought to be, at the Executive Mansion; and I saluted it with all the real respect I felt.

At Mendoza among other educational institutions visited was the kindergarten, and Col. Roosevelt seems to have been touched and gratified by the enthusiastic reception extended him by the children. In fact, the cordiality with which he was greeted by all the people and the generous hospitality extended to him throughout the countries of Brazil, Uruguay, and Argentina, leads him to write:

Of course, this was not done for me personally; it was done as an evidence of good will toward the people of the United States. I do very earnestly hope that our governmental authorities, and our people generally, will show similar courtesy and similar generous consideration for any representative of these South American countries who

visit the United States. The people of the country from whom the man comes accept such courtesy as being shown to them, and as being a proof of good will toward their country.

Hardwood forests of southern South America is the title of a thoughtful and timely article by H. G. Cutler, in the April number of American Forestry. The author deals with the splendid natural forests of Argentina and Paraguay, and urges the adoption of a system of conservation by these countries and points to the present condition of the older countries of Europe and of the United States in regard to their forestal denudation. That this note of warning is most opportune is shown by the fact that some of Argentina's leading publicists are taking up the matter and endeavoring to arouse their people to the dangers incident to a waste of these resources. Mr. Cutler writes:

In spite of the warnings which have come to the older sinners of the earth, such as Germany, France, the United States and others who have seen the error of their ways, Argentina and Paraguay, which embrace the cream of the hardwood forests of southern South America, are allowing them to melt away before the onslaught of land, railway, and manufacturing corporations.

The strong soil has presented the southern republics with vast forests of quebracho, cypress, oak, cedar, and lignum vitae, as well as those varieties which are her own especial offspring—coigue, alerce, and manu—and, in repayment of this generosity, the governments of men have allowed them to be ravished at will, for the payment of paltry sums and in blind forgetfulness of the future. But they say, "Sufficient unto the day is the evil thereof. Why worry? We need the money to live on. The future has always taken care of itself in some way."

True. Nature has always been very good to mankind, in view of how mankind has treated nature. When the forests commenced to thin out, Coal began to yield his treasures. Coal gets to be too cumbersome to be carried into every nook of the universe, and is altogether absent in such great lands as Argentina, and petroleum flows from the bowels of the earth into the furnaces of war ships, factories, and residences. Nature has been a thoughtful, tender mother to careless, ungrateful children. Is it not time that the new, undeveloped nations show their gratitude to her by refusing, from the first, to waste their lives in riotous living?

Along this line is the following from a publication issued from Buenos Aires, the splendid capital of Argentina and financial center of the great companies which are especially exploiting the vast forests of quebracho in the northern and northeastern sections of the Republic: "Attention has been repeatedly called to the danger of the extinction of the quebracho, as little or no check has been placed on the reckless methods of forest exploitation in vogue for many years past. If these are still permitted, according to a very high Argentine authority, few existing quebracho trees will be left standing, as no provision for future systematic planting is being made. There is a constant outcry in the native press for the passing of improved forestry laws, but as yet this very pressing matter has not obtained its share of consideration from Congress. Not only the quebracho, but many other valuable species of trees with which the vast forests of the Republic abound, are in danger of extinction in the not very distant future as the result of inadequate forestry laws. It is a matter of wonder that the several foreign companies having large capital invested in the exploitation of quebracho have not shown systematic regard for their own future interests. * * *"

The general increase in the exportation of logs is explained by the growing appreciation abroad of the fine qualities of the timber for fencing, building, and cabinet-making. It is dense and compact of fiber and water-resisting, besides which its mahogany color contributes to handsome decoration and it takes a splendid polish.

The Argentine railway companies, which now finish a considerable proportion of their really fine ordinary dining and sleeping cars, have found quebracho to have notable advantages over other woods for both strengthening and decorative purposes. Indeed, a demand for many other kinds of native timber, hitherto scarcely considered for building and cabinet-making, is spreading rapidly. It has been discovered that such are more suited to the climate and other conditions than the foreign woods hitherto imported for these purposes.

If Argentina shall awaken to the necessity of soon protecting her splendid northern forests against the ravages of the money-mad corporations, she will place herself among the progressive nations. As the matter stands to-day, over \$10,000,000 worth of quebracho, in logs and extract, is being exported—about \$1,000,000 more of timber than of tannin. The logs are used chiefly for railway sleepers, fence posts, paving blocks, and fuel, and of late years from 60 to 90 per cent of the timber exports have gone to the United Kingdom. Formerly Germany was the largest market for the extract, but the heavy import duties imposed on it have almost barred it from that country. For some years the United States has been getting about 50 per cent of the tannin, whose exports amounted to 75,000 tons in 1912. * * *

The northernmost forests of Argentina have also extensive belts of lignum vitæ, or Brazil wood, whose solid and ornamental qualities have been utilized in so many ways. The southern districts of the Republic, covering what are often called the Patagonian savannahs, carry oak, cypress, and other woods which go into wine casks, furniture, and interior woodwork.

But the quebracho forests of the north and northeast remain by far the country's most valued supply of hardwoods, and upon their conservation will rest Argentina's future as a nation which is capable of learning from the experience of others.

The author goes into considerable detail as to the exploitation of quebracho, the natives who do the work of getting out the logs, their manner of living, etc. Inaccessibility has hitherto saved vast areas of this valuable timber but increasing facilities for shipment are augmenting the danger of denudation, according to Mr. Cutler. In this connection he writes:

The extension of trunk lines of railway into the forest area, and the completion of the links which have brought it into touch with Buenos Aires, the seaboard, and the world's markets, is so stimulating the industries of the country that the denudation of the timber lands should be, more than ever, a matter of present concern. With the fair protection of the forests, and consequent conservation of natural supplies of water, many sections of the country could well be devoted to live stock and the cultivation of wheat, cotton, sugar, and tobacco. But if the land is completely stripped of its forests, and no provision be made for future growths, the coming generation will furnish another hard example of the cruel saddling of unnecessary burdens on the shoulders of unborn sons and daughters of the soil. In the case of the quebracho forests of Argentina, this seems especially hard-hearted, since the natural stock can be replaced in 20 or 30 years—an advantage seldom offered by hardwood as valuable as this.

Bolivia, the Mountain Republic, by Peter MacQueen, in the April number of the National Magazine, is another of the South American series now running in that publication. Mr. MacQueen is a facile writer and mingles enough historical matter with his descriptive paragraphs to make his articles instructive as well as entertaining.

Of the country of Bolivia Mr. MacQueen writes:

Bolivia is the Switzerland of South America. The simple manners of its inhabitants, their sturdiness, their good faith, their industry, the fact that they first estab-

lished permanent principles of republicanism, and earliest suffered martyrdom for the cause of freedom in South America, as well as the steepness and irregular grouping of their many mountains and the fertility of their valleys, favor the comparison. Like Switzerland, too, Bolivia is a country without a seacoast, shut in on all sides by other nations. It lies midway of the continent, just where the great Andean range spreads out to its widest breadth. It is the third largest political division south of Panama. * * *

Bolivia was named in honor of its liberator, and was called for some time the Republic of Bolivar, a title too long for modern patience, even in 1823, to retain. Its people furnish the keynote to-day to a true interpretation of the Spanish-American character. The colonists of Alto Peru became Americanized earlier than in any of the other Spanish possessions in the New World. Though the Criollo retained many inherited sympathies and characteristics, he quickly acquired those others which develop an unconquerable spirit of freedom—the spell of the West working upon heart and life—that led inevitably to national independence. So Bolivians taught South America the fine art of liberty, just as Switzerland taught it to Europe, by splendid example.

The author gives some historical facts in connection with Bolivia's loss of her seacoast territory and deals with the recently completed railways, the Arica-La Paz, and also the Madeira-Mamore, and prophesies a great development of the country as a result of improved transportation facilities. In this connection he writes:

Fortunately for Bolivia, its geographic position easily makes it the natural distributing point for traffic across the South American continent. That fact is to mean much to the Republic in decades yet to be. Rivalry for control of her trade promises to solve satisfactorily this transportation problem of Bolivia, now apparently so troublesome. Little else is needed to hasten the development of her mighty resources and to establish substantial manufacturing and commerce. And business, with education, is the key to national greatness.

In regard to transportation facilities throughout South America generally, Mr. MacQueen makes the following comment:

Certainly the South American republics will begin to realize by and by, indeed are now beginning to realize, that envy and restrictions of trade are retrogressive principles. They will evolve some kind of international South American legislation which will unify for their mutual benefit the rates and conditions of all forms of transportation throughout their continent. Then the world will see developed the most intricate and extensive system of inland natural waterways that exists. Fifty years from now one should be able to travel almost anywhere inside of South America by magnificent steamboats. Hardly a South American river but is navigable a good part of its length, and every large river has a host of broad, deep tributaries that penetrate the heart of the continent. Moreover, the river channels lie so close to each other that short canals would easily connect many of them.

Of La Paz and its picturesque location he gives us the following picture:

La Paz is the capital of Bolivia, 12,500 feet above the sea and 1,500 feet below the railway station. I came thither from Guaqui on Lake Titicaca, a two hours' ride across a high plateau with Illimani shimmering in pristine splendor against a sky of blue. Suddenly a great chasm yawns before the traveler, walled in on three sides by the shining heights and opening on the fourth into a deep quebrada or canyon. We descend by an electric car line, the work of an American. The car sweeps down like a bird alighting, and we find ourselves in the bottom of the canyon in a city of 80,000

people. Think of it, a great capital almost at the height of Pike's Peak! There is a good hotel in the center of the city, and from its veranda I watched the distant glimmer of white snow; while to and fro along the street beneath my window moved a crowd of brightly dressed Aymará Indians mingling with the somber colors of Europeans and Spanish-Americans. A clear stream brings a loitering tribute of crystal waters from the melting snows. The Aymará women are washing clothes, and when the laundry is spread out on the green banks of the stream, it looks like a field of poppies in the month of June.

Detailed description of La Paz, accounts of the vast mineral resources of the Republic, brief sketches of Cochabamba, Potosí, Sucre, and other cities are given, and the author sums up his impressions in his concluding paragraph as follows:

Thus we see a virile people in the Andean Mountains of Bolivia. The white citizens are enthusiastic about their country, and the mixed race is patriotic. The Government is quite sound financially, not having any navy and only a small standing army to support. Until recently it had no debt, but now has a small one, well within the limits of its resources, assumed through investments in railroad building. Bolivia has been foremost in promoting each of the great trunk lines operating into her territory, and has herself constructed most of the local lines. There are some 900 miles of railway either already in operation or nearly completed within this Republic, all aided by the Government, either by guaranty of bond or cash subsidy or large land grants. The great Argentine line is to be ready for rolling stock before another year. That will open the inland capital and Republic to the Atlantic 2,000 miles away at Buenos Aires by all rail. No country anywhere is doing more at present to "be on the map" than Bolivia, and with her great area and remarkable variety of products she must become a powerful factor in the Latin American world.

Bolivia, by C. J. Ryan, in *The Theosophical Path* (Point Loma, Cal.) for April, 1914, is another article dealing with the mountain Republic. After describing the geographical and topographical features of the country, the author gives a brief account of its history and of its political organization. In regard to Bolivia's varied resources, the author writes:

Bolivia is a land of immense possibilities, and its prospects are exceedingly bright. Three countries stand forth in the New World as preeminently rich in mineral wealth—the United States of North America, Mexico, and Bolivia. Though great quantities of gold, silver, and copper have been taken out of the Bolivian mines, there is far more remaining; but the scarcity of labor and the high cost of transportation is a serious obstacle to the working of many of the mines, particularly the silver mines since 1873, owing to the depreciation of the white metal. At the present time tin is the most profitable source of revenue. The ore is of high grade, and in 1910 over 100,000,000 pounds were exported. With the development of the railways and the increase of immigration, the prosperity of the mining industry will greatly increase.

The vegetable resources of Bolivia are enormous, and it is impossible to set a limit to the future of agriculture, for, in consequence of the great variety of climate, every known vegetable can be grown with success. Over 325,000 square miles of vast forests and grazing plains occur in the eastern section of the country, in which the great, navigable rivers flow. This, undoubtedly, will be the seat of the densest population in the future. At present agriculture is in a backward state, and many commodities, such as flour, have to be imported. The chief vegetable article of export is rubber, which is abundant. In 1910 over 8,000,000 pounds were exported. The vast plains of the southeast are capable of raising enormous numbers of cattle.

Relative to those remarkable remains of a prehistoric civilization found in the country, the ruins at Tiahuanacu, the author writes:

To the archaeologist, and to every one who feels the least interest in the mysterious past of the human race, Bolivia offers a source of wonder and speculation unequalled elsewhere in the Americas in the possession of the marvelous ruins of an unknown prehistoric civilization on the shores of Lake Titicaca, on the borders of Peru. Tiahuanacu is in the very heart of the region called the Tibet of the Western World; it lies on a plateau which is over 10,000 feet above the level of the sea and from which the lofty Cordillera Range rises. The ruins consist of rows of stones, carved doorways, stairways, and great monoliths carved in human forms. Looking at these mysterious relics of past greatness, and picturing in one's mind the populous city which once they graced, and which clearly was equal in magnificence to the ancient capitals of Egypt and the Orient, one can hardly feel too much interest. History repeats itself, and we have no reason to suppose that ours is the first real civilization on earth. Indeed, we have every reason to believe the contrary, and that the history of mankind is a very long, slow process of cyclic rises and falls. Each race develops some valuable characteristic and impresses it upon the general consciousness of humanity. * * *

One of the great mysteries of the pre-Inca Empire of which the remains at Tiahuanacu are witnesses, is the fact that the climate is now so severe that it would be impossible to support a populous city at that height above the sea. * * * The hillsides around the lake are barren, except for a few cultivated patches. It is generally believed that the whole country has been greatly elevated since the period of the pre-Incas, and that formerly it had a temperate or warm climate. This implies an immense age for the ruins. Lake Titicaca is the highest body of water on earth which is steam navigated. While crossing the lake the traveler obtains a view of an uninterrupted chain of mighty Nevadas, stretching from Illampu to the graceful Illimani, the beautiful White Lady, which overlooks the picturesque city of La Paz.

Habana traffic conditions and cars, an article in the March number of the Brill Magazine, besides containing a description of the street railway system and a map of the radial lines connecting the residential districts with the business section of the city, also describes the historic capital of Cuba and its environs, its port facilities, and gives a brief account of its commercial activity.

Habana, the foremost city of the West Indies in point of population and commercial importance, is situated on the northeast coast of the Island of Cuba, of which it is the capital, and is about 90 miles southwest of Key West, Fla. The census of 1907 gave the city a population of 302,526, but the number of inhabitants at present is reliably estimated at about 325,000. To this must be added a very large floating population, for, in addition to its standing as a commercial point, the city is a most popular resort for tourists, especially during the months of December, January, February, and March, when thousands of pleasure seekers find convenient transportation by the daily steamer service from the Florida ports and a semiweekly service from New York. * * *

The harbor of Habana is one of the finest in the world, being a landlocked bay, spacious and easy of access. The entrance averages about 260 yards in width and is free from rocks and bars. Inside the bay divides into three distinct arms—Mari-malena, or Regla Bay, Guanabacoa Bay, and the Bay of Atores. There is ample depth along a considerable portion of the water front for large merchantmen to come alongside to discharge and receive cargo. Although for centuries sewage and all manner of refuse was permitted to pollute the harbor, the extent to which this has raised the bottom is greatly exaggerated, according to the best authorities, and certainly the available depth for commerce has not been impaired.

Viewed from the sea or the bay, the city presents a very picturesque appearance. Founded early in the sixteenth century by Spanish settlers, the early Spanish custom of narrow streets and low, thick-walled houses was followed. Although there are a number of buildings up to four stories in height, most of the houses are of one high story. For over 400 years the city was distinctly Spanish in type and customs, notwithstanding its proximity to the United States. Since the overthrow of the Spanish régime, however, and the influx of American capital and labor during the first American intervention in 1899, the customs have been gradually changing, and the city is daily becoming more Americanized.

The promenades, drives, and public gardens of Habana are world famous. On the Habana side of the bay is a sea wall, along which is an excellent drive. In addition to these features the city is noted for its churches and public buildings which, though conforming to the prevailing customs of low but massive construction, are nevertheless extremely fine. Principal among these is the palace. This was formerly the residence of the Spanish governors general, but is now the home of the President of the Republic and the seat of national and municipal government. The city was formerly surrounded by a wall, which was begun in 1671 and finished about 1740. Although this was almost completely demolished between 1863 and 1880, and only a few scattered remnants survived the American military occupation of 1899-1902, it is still customary to speak of the intramural and extramural city.

The former or old city lies close to the water front and is laid out with streets so narrow as to make wagon traffic a matter of considerable skill in driving. The business district of the city lies along the water front at the extreme eastern end. Obispo, O'Reilly, and San Rafael Streets accommodate the finest retail trade.

The residential districts spread out to the northwest, west, and southwest into five distinct suburbs. In the city proper the Prado and the Cerro contain the finest residences, but the new city, including the suburbs, is laid out on a somewhat more spacious scale, with wide streets and handsome grounds around the houses. Most of the latter, and particularly those of the wealthy planter aristocracy, are massive structures, built of the limestone which underlies most of the island, with heavily parapeted, flat roofs, grated windows, and interior courts. The poorer houses are generally built of brick with plaster fronts, and the sections occupied by the laboring class are densely crowded. * * *

Habana commands the wholesale trade of the entire western half of the island, and is the commercial and banking center of the Republic of Cuba. Its principal foreign customers are the United States and Great Britain. The two staple exports are tobacco and sugar, although the port enjoys a large trade in fruits, rum, wax, honey, oils, starch, and fine cabinet woods. Tobacco is the chief manufacturing industry of the city, there being more than 100 cigar factories of the first class. In addition to making boxes and barrels for the tobacco and sugar trades, the manufacture of wagons and carriages is carried on to quite an extent, and some machinery is also made, but the weight of taxation imposed during the Spanish régime acted as a heavy deterrent to operations requiring considerable capital. This has been removed, however, under the republican form of government, and the manufacturing industries of the city are becoming much more varied and extensive. Habana is the starting point of railroad systems which reach all parts of the island.

Is the earth drying up?, by Prof. J. W. Gregory, D. Sc., F. R. S., in the February and March issues of *The Geographical Journal*, is a scholarly and exhaustive treatment of this very interesting problem which is being argued pro and con by some of the world's leading scientists. The evidence for and against the increasing aridity of the earth, considered from a botanical, historical, and geological viewpoint is carefully weighed by Prof. Gregory, this evidence being taken

from all portions of the world and from many sources, the conclusions of many scientific observers being subjected to a searching analysis. One of the leading investigators of the problem is Prof. Ellsworth Huntington, of Yale University, whose able article in Harper's Magazine for July, 1912, entitled "The Secret of the Big Trees," was reviewed in the **MONTHLY BULLETIN**. In that article Prof. Huntington dealt with the evidence derived from an examination of the rings of growth of the *Sequoia gigantea* of California, which supported his view that the variations in climate all over the world had been in a pulsatory fashion. In other words that the climatic changes even within the historical period of man had been in alternate waves of aridity and humidity, and that these pulsatory periods were plainly discernible in the periods of increased or retarded growth as shown by the rings of these giant trees, whose ages in some instances covered a period of 3,000 years. In his examination of the evidence as to the increasing aridity of the earth generally, Prof. Gregory refers to the conditions presented in North America, and in this connection refers to Prof. Huntington's deductions as follows:

If the changes in central Asia are part of a world-wide movement, then corresponding changes should also be observed in North America. That there has, at some time, been a moister period in the western mountains of the United States is shown by the former greater extension of the lakes. Thus the Salt Lake of Utah is now only a comparatively small lake left on the deepest part of the basin of the great Lake Bonneville, which was in existence in glacial times, and had shrunk to about its present size in prehistoric times.

In North America there is ample geological evidence of changes of climate—but in times before the advent of man. Prof. Huntington maintains that there is also evidence of climatic variation during the human occupation of North America. Thus the arid regions of New Mexico have been occupied by three successive races of Indians. The first were the Hohokam, who, according to Prof. Huntington, occupied the country about 1,200 B. C. They became extinct, and in the seventh century A. D. the country was occupied by the Pajaritans, who also disappeared; subsequently in a moist period which began in the thirteenth century, the Pueblos occupied the country and held it until the eighteenth century. These successive abandonments and reoccupations Prof. Huntington attributes to climatic pulsations, of which he claims that there is direct evidence. Thus he considers that the ruins of villages and settlements in many districts, especially the Santa Cruz Valley, are so numerous that the population must have been greater—in one place, he writes, twice as great as can live there now. The abundance of these ruins has, however, been explained by the rapid migrations of the people. He quotes the verdict by Mindeleff, whom he describes as "one of the best authorities," that a band of 500 Indians could leave the ruins of 50 villages in a century. Prof. Huntington rejects this estimate as assigning incredible mobility to agricultural people. It does not, however, seem improbable; thus in parts of Africa the agricultural tribes may be almost termed nomadic. In Angola, for example, according to the information given me by the best local authorities, the natives only cultivate the same plot of ground twice running and then abandon it for many years, and though they need not shift the villages as often, they move frequently and on very slight provocation. In an arid district agricultural tribes are frequently compelled to move, for the supply of firewood is small and easily consumed, and the soil, though very productive when first watered, is quickly reduced in fertility.

As direct evidence of climatic pulsations, Prof. Huntington adduces the terraced structure of the valleys, which he explains as due to sheets of alluvium being deposited in dry periods and the valleys being excavated when the rain increased. Each terrace would thus indicate one climatic pulsation. But as a series of earth movements would produce exactly the same effect, the evidence of the terraces is inconclusive.

Prof. Huntington has also made ingenious use of the big trees of the Western States of America. Prof. A. E. Douglass has shown that the variations in thickness of the rings of growth in these big trees indicate a periodic variation in the rainfall, with periods of 11, 21.2, and 32.8 years. Prof. Huntington has extended this method in order to determine the variations of climate during the 3,000 years occupied in the growth of the giant California sequoias. The interpretation of these annual rings is difficult, for the rate of growth must vary with many nonclimatic factors, such as the age of the tree, overcrowding, the loss of shelter, changes in the undergrowth, epidemics of blight and insect pests, and injuries by hurricane. Prof. Huntington allows for variations due to the age of the tree by a correction, but the determination of the correct factor must be difficult. Prof. Douglass has clearly shown that these trees confirm the existence of successive wet and dry periods, but the evidence hardly proves that the trees 3,000 years old spent a moist youth.

These trees may indeed be quoted as evidence that the climate has not materially altered during the past 3,000 years, since the conditions have remained sufficiently uniform for these forests to have continued in existence.

Prof. Gregory then quotes numerous other authorities relative to the probable dessication of the arid regions in New Mexico, as well as their conclusions in regard to the climatic changes in other parts of North America. The theory that there has been any material change in the climatic conditions of the continent as a whole seems to him not proven. He writes:

The archaeological evidence in favor of dessication in this arid region during the past 1,000 or 1,500 years is admittedly inconclusive, and some geological authorities are strongly opposed to this view. Thus, according to Dr. W. C. Mendenhall, "On the whole, evidence of climatic changes in the late Quaternary in the arid regions of the Southwest have not been recognized. He thinks that as the region is one of very active and recent mountain growth, phenomena, which in more stable regions might be interpreted as indicating climatic changes, are probably to be explained as due to land movement."

If there has been any recent desiccation of New Mexico, it would only be a local phenomenon, as other parts of North America show either no change or a reverse change. That the present climate of North America is, in many districts, even moister than formerly, and that it may be still becoming moister, is supported by many authorities. Dr. W. C. Alden, of the United States Geological Survey, in a recent brief review of the evidence, quotes numerous authorities who believe that the climate of the central parts of the United States has been drier than that of the present day. Thus the widespread deposits of loess in the upper Mississippi valley are themselves indicative of a drier period, and the fossil shells found in this loess, according to Prof. Shimek, "point to a somewhat drier climate." * * *

Warren Upham tells us that the lakes of Dakota "have stood continually lower than now, at least by several feet, during a long period;" and he refers to that time as a "prolonged period of comparative desiccation" which has been succeeded by the present wetter conditions. The evidence regarding the Great Plains, which extend from the Missouri to the foot of the Rocky Mountains, has been surveyed by Dr. Alden, who maintains that "excepting annual variations in the amount of precipitation there are so far as known to the writer no data in hand showing that the climate over the plains has been markedly different within recent time from that obtaining at the present." * * *

Dr. Alden concludes that at the time of the great lakes in the western mountains of the United States, the climatic conditions did not differ greatly from those of the present, though there has been a period of greater aridity than prevails to-day. He remarks that "the change now in progress, if any, seems to be toward a more humid climate."

From all this mass of evidence collected, and Prof. Gregory gives us a list of about 85 eminent authorities consulted, we gather that the theory that the earth is gradually drying up is as yet lacking in convincing proof. He gives us his own summary of conclusions as follows.

Owing to the varied nature of the evidence to be considered, the extensive and scattered literature whence much of that evidence has to be gleaned, and the contradictory opinions expressed by high authorities, the problem whether the earth is drying up is hedged about with difficulties. But one fact does seem to me to result clearly from the evidence; there have been many widespread climatic changes in late geologic times, while in historic times there has been no world-wide change of climate.

If we consider particular countries, such as Egypt and Palestine, the balance of expert opinion is strongly in favor of the view that there has been no climatic change in either since the earliest existing records. The belief in a lesser rainfall in Palestine has been fostered by the oft-repeated comparison of the Hebrews between the stony wilderness of Sinai and the matured fertility of Canaan. But it may be concluded from the most precise tests now available, from the range of the date palm and the vine, and from the facts recorded by Old Testament writers, that the climate of Palestine is the same to-day as in the time of Moses.

Returning to the wider question—geological evidence shows how the passage from the climate of the glacial period to that of our own day has proceeded on two main lines. In some countries there has been a gradual rise in temperature since the disappearance of the ice, accompanied either by an increase or decrease in humidity. In other countries the glacial conditions were succeeded by a warm, dry period, followed again by wetter conditions. This increased humidity characterizes the present climates of Scandinavia, Germany, Hungary, Roumania, the eastern and southern parts of North America, parts of Africa from Nigeria to Cape Colony, and there is some evidence of the same change following a dry post-glacial period in England. As an increased rainfall has been demonstrated for so many parts of the world, it is only natural to expect a compensating decrease in other districts; and there is accordingly a predisposition to accept the claim that central Asia is suffering from increasing desiccation.

Yet it is well to remember that the extent of such change may be easily exaggerated by attributing to recent climatic changes the effects of prehistoric variations. For archaeological and historical evidence shows that Central Asia and even the coasts of Persia and Beluchistan had a very arid climate in the earliest times of which we have human records, that the Caspian Sea was at least as small and as low in the fifth century as it is now, and that the African and Asiatic deserts are in places again passing under cultivation. Though it must be admitted that, while there is a strong balance of opinion in favor of the view that the aridity in Asia is being still increased, there are weighty authorities on the other side.

Homenaje a la Raza India Norteamericana (Tribute to the North American Indian Race) is the title of an article in the Spanish edition of the MONTHLY BULLETIN of the Pan American Union for March. The subject is the memorial which is being erected on a hill located near the Narrows of New York Harbor, by the American Indian

Memorial Association, an organization of patriotic Americans which was brought into being through the efforts of Mr. Rodman Wanamaker. The following excerpts are free translations of some of the leading paragraphs of the article:

From the time Columbus and his followers sighted the island of San Salvador centuries ago, the aboriginal inhabitants of the North American Continent have been known as Indians or red men. They have been both friend and foe to advancing civilization, and the older the nation grows the greater the conqueror respects the vanishing race. It is believed that four centuries ago something like a million Indians lived in the country which to-day forms the United States; but civilization has apparently wrought the doom of their life and conditions, for at present we have only about 350,000 of this proud and once powerful people. In other words, the Indian has decreased 65 per cent since the coming of the white man.

Poets have written about the red man and his wonderful deeds; artists have pictured him in the glories of the forest and in the heat of battle, in which oftentimes he has been more than a match for his more enlightened antagonist; but it has remained for an American millionaire to place a most enduring monument to the Indian's honor. * * *

The monument which is thus to commemorate the life of the American Indian will stand in one of the most conspicuous places in the country, and the passenger on every ingoing and outgoing ship will pass in full view of its stately form. It was the donor's idea to perpetuate the Indian's manner of life, his costumes and customs, etc., and in order to fulfill this wish there will be connected with the monument a museum in which will be placed many interesting relics, curios, paintings, pottery, weapons, etc.

The monument and its approaches will cover several acres of ground, while the landscape gardening and surroundings will be extensive and attractive from all directions. The monument proper will rise from a central building, flanked by two wings; the middle structure will be 35 feet high and on this as a pedestal will stand the Indian figure 70 feet high. The latter will be of bronze and represents an Indian with upraised right arm looking out over the harbor, which at all times is active with ships and shipping from every quarter of the globe.

Brickwork statuary is the title under which a recent issue of the Scientific American describes a monument which is to be erected on the banks of the Weser in Germany to commemorate the work of a German explorer in the wilds of Africa. In olden times bricks were commonly used for such purposes where stone was scarce, and, according to this account, the moderns are but borrowing from the ancient people of Asia the method of construction, which is as follows:

Instead of fixing a raw block in position and hewing it with the chisel, as is frequently done with the reliefs on English houses, thereby laying the brick open to atmospheric influences and destroying the remarkable picturesque charm of the vivid colored material, the monument is molded bodily out of the unburnt brick clay, cut into layers and stones, and each finished up carefully. In the kiln the molded parts are laid on a sand bed, insuring perfect mobility during the baking process and excluding any risk of breaking or bending. A perfectly uniform shrinking of 15 to 16 per cent may be accounted for. When the monument is next erected on the spot, the insertion of a proper thickness of lime-cement mortar into the joints between the brick layers restores it to the originally contemplated dimensions.

Doubtless the camel, the typical beast of burden of the Dark Continent, was selected because of its significance in connection with things African. It may not be amiss to state that, according to some of our modern scientists, the cameloid family really had its origin in the New World. The llama, guanaco, vicuña, and alpaca are the South American varieties of the camel family and differ from the African chiefly in size and in the absence of the hump and in not being as well supplied as to stomachs. The necessities incident to their desert home, particularly the advantage of carrying a surplus water supply internally, account for this anatomical peculiarity of the African genus, and since no such necessities existed in their habitat this development is absent in their American progenitors.

Nicaragua to-day is the general title under which the Pan American Magazine (New Orleans, La.), in its April issue, presents some excellent sketches of some of the leading Nicaraguan cities and various sections of the country. Other articles in the same number are Nicaragua and The United States, by David Pollard; Nicaragua Before and After Independence, a most interesting historical sketch, by L. E. Elliott; The San Antonio Sugar Estate, etc.

Of Managua, the capital of the Republic, it is stated:

Managua is credited with a population of about 45,000 people, Leon claiming 65,000. Its position as chief town of the Republic insures its growth, the best stores of the Pacific slope having their headquarters there. It is the administrative and diplomatic center, and has a remarkable fine natural situation. When I first saw Managua it was a matter for grief that this position was apparently so little appreciated.

The town lies on the south shore of the lake of Managua, a body of water 38 miles long and 16 miles wide; it is guarded on the west and north by lines of hills varying in height, none of them reaching to the altitude of hoary Momotombo, whose head shines with the glow of its internal fires at night. Away to the east, and out of sight from Managua, lies the great Lake Nicaragua or Lake Granada, a magnificent sheet of water nearly 100 miles long by 40 miles wide; on the shores of this lake are a number of little ports, and the beautifully situated city of Granada, aristocratic stronghold of the Republic.

The two lakes are connected by the river Tipitapa, and Lake Nicaragua in its turn seeks an outlet by the river San Juan into the Caribbean. It is this river that has attracted attention ever since an interoceanic canal was seriously thought of, for together with the great lake it forms a natural waterway right across the body of the continent, a strip of 30 miles only (presenting, as far as is geologically known, no difficulties in canalizing) intervening between the lake and the Pacific Ocean. * * *

Outside of the town limits of Managua there are some delightful rides and drives; one road parallel with the beautiful lake runs east toward the town of Tipitapa, and is one of the most charming roads in Central America; overhead are the interlacing branches of great trees, between their trunks are glimpses of the blue water, with a line of violet hills beyond; on the right are sunny woods and fields, with here and there a little hacienda. Tipitapa itself is but a dozen miles away, a quaint little place beside a cascade, where the lake empties; it is a picnic place for Managua, and possesses some famous medicinal baths.

Other medicinal baths of old fame are found in the thick sulphurous mud of Lake Nejapa, 4 or 5 miles from Managua; it is of peculiar formation, this lake, and is doubtless volcanic in origin and supply. Its renown dates from pre-Spanish times, and the Indians still resort to it for cures; it has probably just as much curative power as the thronged *bads* of the European continent.

Granada is most entertainingly described, its romantic history being outlined in paragraphs like the following:

At the foot of Mombacho volcano, and nestled into the upper west corner of the great Lake Nicaragua, this has been the place of a considerable population for untold centuries; the Spaniard of the Conquest was preceded here by a large and wealthy tribe of natives. When Hernan de Cordoba, leader of the second Spanish expedition into Nicaragua, explored the country, he found a flourishing Indian city called Galtera, whose chief permitted the Spaniard to found Granada close by this place; it was named after the birthplace of Cordoba in sunny Spain. * * *

This fertile valley by the lake, sheltered by the great wing of old Mombacho, was always a fine fruit country; the cacao was famous in Central America long before the Spanish era, and when these colonists introduced the orange and lemon, pineapple and almond, grape and olive, it was not long before Nicaragua became famous for its fertility. It was called the "fairest jewel of the Spanish Crown," yielding gold and silver with the same prodigality that it yielded dyewoods and tobacco. After the exploration of the lake and river and discovery of its certain connection with the Atlantic, Granada grew to fame as the head of water navigation from the Atlantic, or, rather, the Caribbean Sea.

In Spanish days the level of the great lake was at least 12 feet higher than it is to-day, and the river flowing seaward was correspondingly deeper; ships laden with silks and wines and weapons and all such things as settlers might need sailed proudly up the San Juan River and anchored outside Granada; they took away with them gold from the mines, indigo and cochineal, skins and feathers, sugar and tobacco, and carried the news of the colony home to Spain, just as they had brought the news of Spain to Nicaragua.

Interesting side lights are thrown on the historic features and graphic pictures of the present Granada are given. In the same manner Leon, at various times the capital of Nicaragua, is dealt with, the following paragraph giving an idea of the attractive style of the narrative:

Once upon a time Leon was a center of Spanish colonial magnificence; wealthy owners of great haciendas and gold mines lived here with a retinue of servants, their houses beautified with velvets and silks from Spain, their tables supplied with wines and sweetmeats. These amenities of life in the New World were brought by the ships that cruised up and down the west coast, for there were palmy days in the sixteenth and seventeenth centuries when high-prowed Spanish galleons spread their beautiful sails and fluttered their gay pennons along the Pacific shores, and there was a scene of activity in these waters which passed away with the decadence of Spain.

The port of Corinto also comes in for its share of description, the author noting considerable improvement within the last five years:

Corinto has improved perceptibly since I saw it first some five years ago; it has a general air of increased prosperity, stores and hotels are better by 100 per cent, and there is a notable addition to activity in building. Several good residences have been put up—the large wooden airy houses eminently suitable for this consistently warm climate—sidewalks have been newly boarded, and at this season, when the gathered coffee crop is being hurried to Europe as fast as steamers can take it, there is an atmosphere of hustle at the wharf.

The town of Rivas is also described briefly, and short articles dealing with the northern and eastern sections of the country give the reader a good idea of the country generally.

Across the Venezuelan Llanos, in Harper's Magazine for May, is another of Charles Wellington Furlong's inimitable travel and adventure stories. As usual, the author throws just enough of his own personality into the narrative, interjects entertaining bits of conversation and comments, and gives us realistic pictures of the natives which throw instructive side lights on their customs, character, and environment. When you finish one of Furlong's stories you always feel as though you had been with him in person, and had seen the things he describes with your own eyes.

In this instance he begins his journey at San Fernando, an old town on the Apure River founded by Spanish monks in 1798, which he reached by a 600 miles trip up the Orinoco and then up the Apure, which is one of its tributaries. It was at the beginning of the rainy season and, owing to the rising floods, the journey across the llanos, as the great Venezuelan plains are called, was attended with considerable discomfort, some hardships, and more or less danger. After some difficulty the author succeeded in purchasing a bay stallion and a roan horse, and also secured the services of an excellent guide. The last of the season's cattle drives were taking place and the author's descriptions of the *llaneros*, or Venezuelan cowboys, and their methods of handling the half-wild cattle in the long swim across the Apure and the subsequent long drives across the water-soaked plains of the herds, numbering into the thousands, are interesting and entertaining. The following passages, describing his start, give some idea of the discomforts of such a journey in the wet season of the year:

We embarked with animals and outfit on a pontoon of canoes aboard which the fractious stallion nearly capsized us. Though propelled with heavy sweeps and helped by the sail of a *curiare* (dugout) lashed alongside, the current swept us nearly down to the steep banks, where landing would have been impossible.

Fermine Blanco on his mule, leading the pack horse, and I on the bay stallion, soon reached a low, wet country called *estero*, covered with a tall, rush-like *carex*, now lying flooded between us and the nearest settlement of Camaguan, perhaps 8 *leguas* (leagues) journey--the *legua* being the Venezuelan standard of distance. Fermine stated that his mule could travel steadily from 6 to 6 going 24 leguas a day. Mules are faster walkers and surer-footed than horses, consequently more expensive.

We floundered through muddy water and tall grass; the latter, frequently above our heads, shut us completely in, as hour by hour we souped and splashed. Cloud-bursts drenched us, and with growing uneasiness Fermine urged on the animals and pointed to the insidious waters rising now above their knee joints. * * *

Our animals were our best barometers, wonderful at sensing danger. The *caños* (small river canyons) were the worst places, and meant swimming--saddles, clothes, and all--into the uncanny, soupy flood. With one hand I hung on to the mane, and with the other, well out of water, gripped my revolver and my waterproof bag, containing camera films and other perishable supplies.

The following excerpts deal with the topography of the country as a whole, the plains in particular, the vegetation and animal life encoun-

tered, and the peculiar characteristics of the *llanero*, or cowboy, of Venezuela:

The cultivated mountain valleys and plateau lands of the fertile north form the agricultural zone; the pastures of the llanos, the pastoral zone; the *bosque*, or wooded lands, from the Orinoco south, the forest zone. The central zone, the llanos, stretches probably 120,000 square miles east and west almost the entire length of Venezuela, from the Meta in Colombia to the delta of the Orinoco; and from near the coast (10° N.) to the Rio Guaviare within two and a half degrees of the equator.

In summer the heated "Trades" spread some relief over the feverish earth-cracked llanos, but during the greater part of the winter vast floods render extensive regions impassable. Thus the llanos have ever been a great barrier to communication, a sequesterer of their scattered inhabitants, and an obstacle to the union of the political provinces they separate, and they will for a long time be an important factor in the military and political events of Venezuela. The western llanos are hottest, and even at the time of our passing, the beginning of the rains, the sun beat down relentlessly.

* * *

Steadily our faithful animals jogged along, sometimes for hours at a time plashing through water under the brilliant yellow-green *mariche* palms, among *ceiba* trees or groves of *chaparra*; on drier ground their unshod hoofs fell softly, wending through waving grasses, small mimosa bushes, primrose-like flowers, white lilies, and diminutive irises. Then the smell of mint, and we reached from our saddles and pressed handfuls to our nostrils. Dragon flies sowed their iridescent ways, and butterflies flitted hither and thither. Now here, now there, the wide-spreading *ceiba* had wound its spiral growth completely about a palm trunk, leaving only its feathered top strangely protruding. Fermine substantiated my experience of never having seen a mata palo growing alone from a palm.

Over these grassy plains the little armadillo ferrets its way, and graceful Venezuelan deer abound. The jaguar ventures a short distance from the wood edges, where may be heard the dismal noise of the *araguanos* (howling monkeys). But nature uses these savannas mainly for a vast aviary. Flocks of parrots flew screeching over our heads, there were cuckoos galore, and daily we saw on these feeding grounds innumerable herons, aigrettes, cranes, flamingos, plovers, finches, hawks, wrens, and numerous gorgeous water and marsh birds of many varieties, which piped, sang, whistled, and trumpeted. Numerous carcasses eaten by the *zamuros* (the vulture ibises of South America) indicated that hundreds of horses succumb to the floods, while scars on the flanks of many live ones bear evidence of pursuit by crocodiles.

The sun shone like a bowl of brass through a dark, murky sky, brushed the cloud-edges golden, and fine-streaked the innumerable trunks of the palmettos which were mirrored in the muddy waters through which our little caravan splashed, scattering myriads of glistening showers, and leaving a diverging, ever-widening wake of gold and purple wavelets which were lost amid the blue-violet palm shadows. * * *

Wherever I have followed the cattle drive, whether on the Patagonian pampas with the *gaucho*, in the Moroccan valleys of the Atlas with Riffian tribesmen, through the canyons of our own Rockies with cowboys, or on the great llanos of Venezuela, the life was always strikingly similar and insidiously gripping in its fascination. Here man is in one of his most elemental callings, often as wild and untamed as the long-horned steers he drives.

Mysteriously echoing from every wood and copse and across each broad savanna we heard the resonant, far-off cries of the *llaneros*—"H'oh! h'ah! H'oh! h'ah!"—as illusive as the llano mirage, and finally caught up with the herd, slushing at will under palms through the yellow mush. "Oy! oy! Ah-hee!" the *llaneros* urged on the laggards, when we, too, lent a hand, for often we were with cattle all day, or took hours to work through a big herd, which usually traveled 5 to 6 leagues a day, from 6 to 6.

COMMERCE OF THE DOMINICAN REPUBLIC FOR 1913

THE total foreign commerce of the Dominican Republic for the year 1913, according to the report of the receiver general of Dominican customs, amounted to \$19,742,225, of which \$9,272,278 represented imports and \$10,469,947 exports.

The figures for the year 1912 were: Imports, \$8,217,898; exports, \$12,385,248; total, \$20,603,146. There was therefore an increase in imports of \$1,054,380, and a decrease in exports of \$1,915,301, or a net decrease for the year 1913 of \$860,921.

The balance of trade (excess of exports over imports) in favor of the Republic for the year 1913 was \$1,197,669. For the year 1912 it was \$4,167,350.

IMPORTS.

The imports for the last five years, by countries of origin, were as follows:

Countries.	1909	1910	1911	1912	1913
United States.....	\$2,374,025	\$3,739,025	\$4,120,483	\$5,100,001	\$5,769,061
Germany.....	911,976	1,080,241	1,266,249	1,628,286	1,677,833
United Kingdom.....	576,516	715,400	775,802	720,242	730,191
France.....	188,948	210,269	213,455	224,912	274,318
Spain.....	69,216	123,453	152,461	149,734	210,781
Italy.....	103,444	102,169	139,448	131,356	173,105
Porto Rico.....	124,393	124,613	84,941	41,901	62,900
Cuba.....	6,213	2,710	8,262	6,578	7,352
Other countries.....	71,182	159,811	188,561	214,888	366,737
Total.....	4,425,913	6,257,691	6,949,662	8,217,898	9,272,278

The imports by principal articles for the last five years were as follows:

Articles.	1909	1910	1911	1912	1913
Cotton manufactures.....	\$925,970	\$1,481,344	\$1,616,921	\$1,608,465	\$1,880,211
Iron and steel, and manufactures.....	609,416	963,334	998,010	1,626,800	1,345,809
Rice.....	414,271	497,046	540,204	772,982	736,751
Meat and dairy products.....	242,055	416,291	415,346	420,978	606,790
Oils.....	226,065	337,550	320,867	312,070	448,384
Flour, wheat.....	309,282	410,705	406,536	453,177	443,421
Wood and manufactures.....	153,600	204,734	256,369	343,429	392,398
Vegetable fibers, and manufactures other than cotton.....	128,776	171,299	229,180	236,250	281,066
Leather and manufactures.....	140,751	208,587	237,076	201,312	275,530
Fish, preserved, and fish products.....	108,453	184,779	193,911	190,864	237,695
Chemicals, drugs, and dyes.....	88,307	143,275	157,797	165,843	212,834
Vehicles and boats.....	49,341	51,019	109,878	154,403	183,244

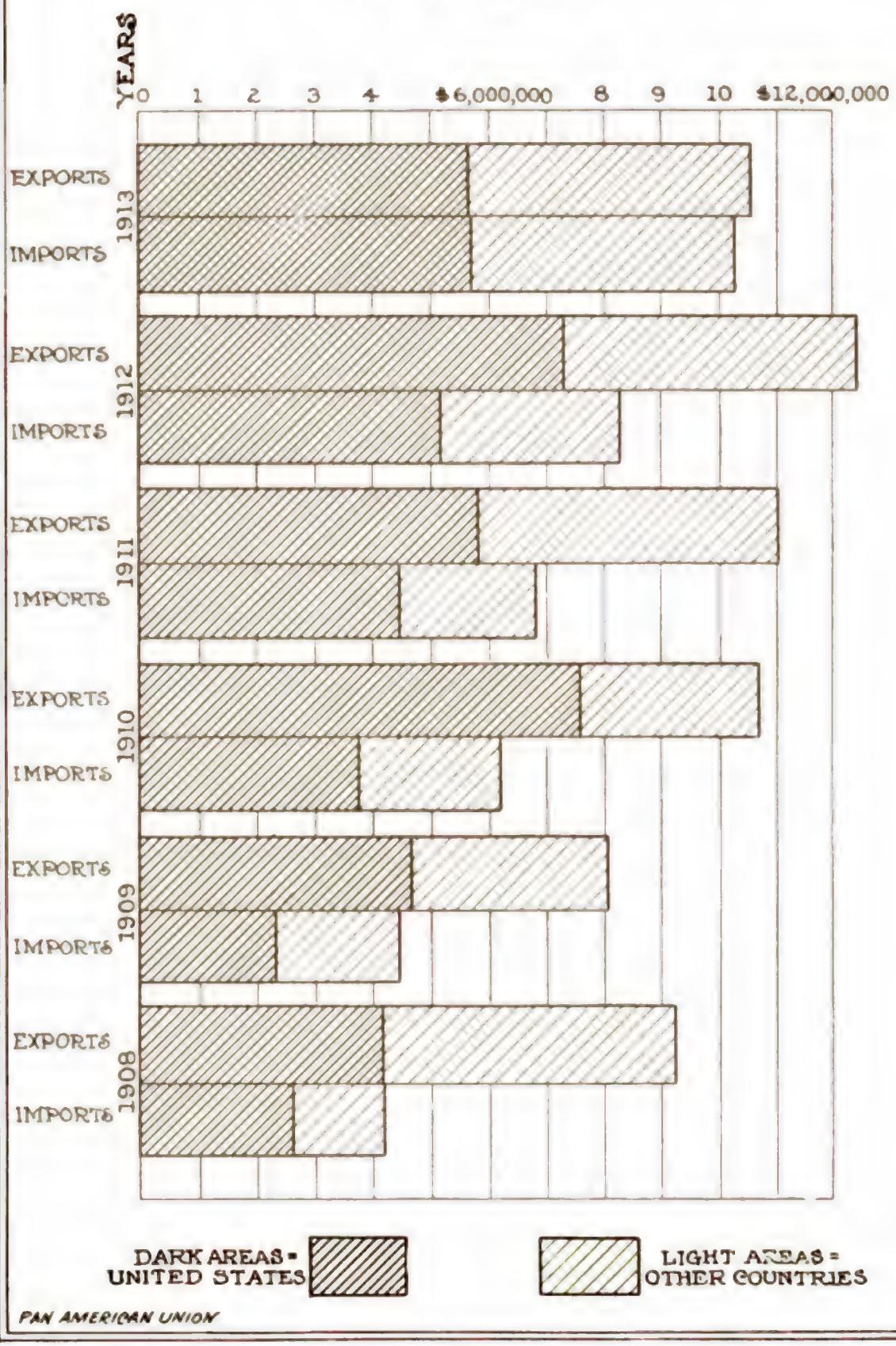
Articles.	1909	1910	1911	1912	1913
Sugar, refined, and confectionery.....	\$79,055	\$96,540	\$96,292	\$128,200	\$163,377
Beer, bottled.....	68,702	88,660	87,991	107,091	147,182
Agricultural implements.....	29,032	39,135	54,469	139,352	143,418
Paper and manufactures, not including printed matter.....	52,846	74,465	80,025	105,152	125,683
Materials used in the manufacture of soap.....	58,509	49,092	29,226	59,908	103,989
Coal.....	29,894	49,625	47,791	53,450	95,771
Breadstuffs other than wheat flour.....	41,405	58,655	57,313	63,755	91,528
Wines and liquors.....	45,264	51,342	53,043	64,155	89,688
Hats and caps.....	42,068	58,245	75,906	70,700	89,253
Soap.....	68,609	75,560	88,249	75,119	86,884
Vegetables.....	43,221	63,984	56,980	51,636	84,561
Silk, manufactures of.....	(1)	(1)	(1)	58,262	78,600
Wool and manufactures.....	41,079	30,550	56,835	57,339	77,920
Metals and manufactures other than iron and steel.....	12,768	31,799	51,283	68,562	69,632
Jewelry, including watches.....	38,684	30,496	32,196	36,728	56,927
Paints, pigments, and colors.....	20,723	34,277	36,207	44,046	56,073
Glass and glassware.....	30,757	34,627	44,969	41,626	55,380
Earthen, stone, and chinaware.....	25,072	21,234	33,682	49,741	45,498
Perfumery and cosmetics.....	18,594	34,966	25,897	40,401	43,776

¹ In 1909, 1910, and 1911 not separately stated.

The imports by articles and countries for the year 1913 were as follows:

Articles and countries.	Quantity.	Value.
Cotton, manufactures of:		
United States.....		\$1,040,988
United Kingdom.....		476,914
Germany.....		180,897
Spain.....		57,398
Italy.....		43,234
France.....		41,771
Porto Rico.....		10,948
Cuba.....		40
Other countries.....		28,021
Total.....		1,880,211
Iron and steel and manufactures of:		
United States.....		1,028,079
United Kingdom.....		122,614
Germany.....		92,546
France.....		8,899
Spain.....		5,838
Porto Rico.....		4,155
Italy.....		398
Cuba.....		25
Other countries.....		83,345
Total.....		1,345,899
Rice:		
Germany.....	12,779,486	722,055
United States.....	102,093	7,465
United Kingdom.....	27,745	1,690
France.....	9,000	560
Spain.....	5,215	538
Italy.....	196	23
Other countries.....	79,200	4,420
Total.....	13,002,935	736,751

DOMINICAN REPUBLIC COMMERCE 1908~1913



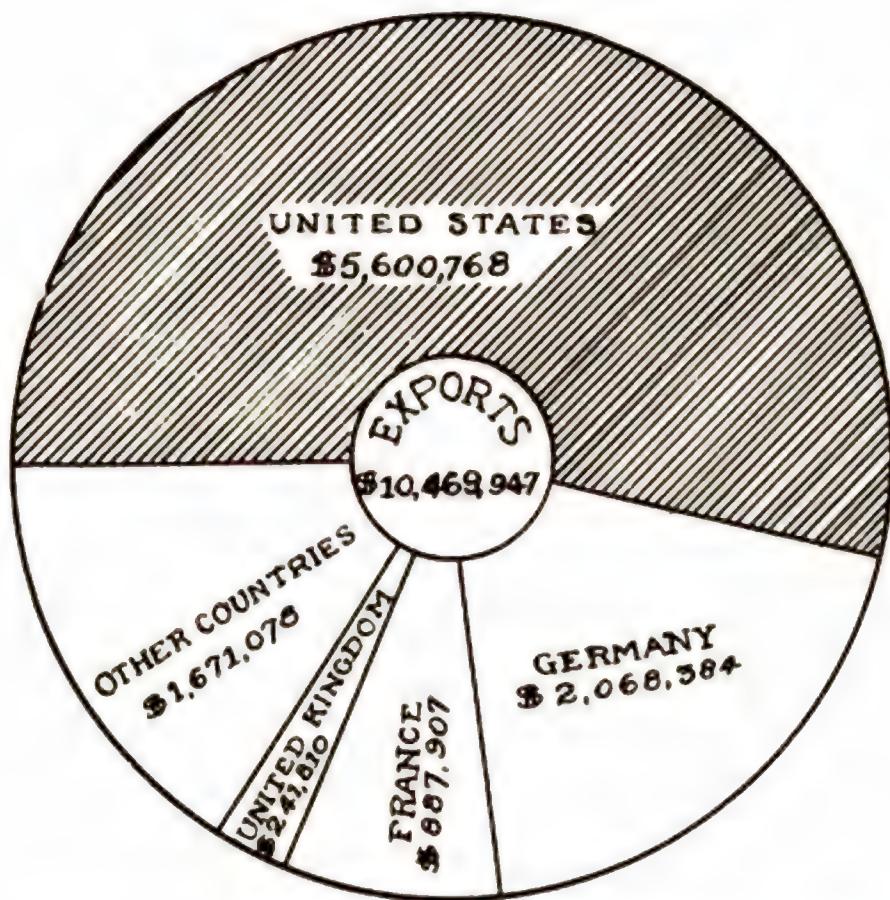
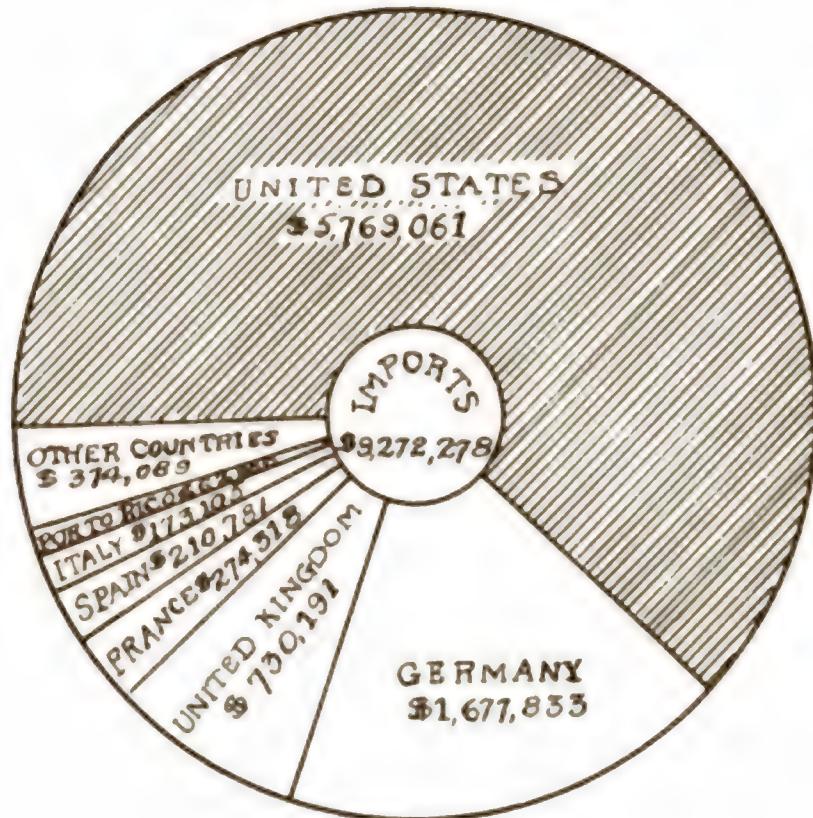
Articles and countries.	Quantity.	Value.
Meat and dairy products:		
United States.....		\$356,378
Germany.....		87,482
France.....		2,714
Italy.....		2,682
Spain.....		2,031
United Kingdom.....		1,560
Porto Rico.....		187
Cuba.....		163
Other countries ¹		153,593
Total.....		606,790
Oils:		
United States.....		384,082
Spain.....		30,078
United Kingdom.....		13,965
France.....		5,943
Germany.....		4,972
Italy.....		2,434
Porto Rico.....		132
Other countries.....		6,778
Total.....		448,384
Flour, wheat:	<i>Kilos.</i>	
United States.....	7,182,456	440,961
Porto Rico.....	78	7
Germany.....	67	6
Other countries.....	42,795	2,447
Total.....	7,225,396	443,421
Wood and manufactures of:		
United States.....		349,973
Germany.....		35,357
France.....		2,948
Spain.....		1,675
Porto Rico.....		1,331
Italy.....		324
United Kingdom.....		206
Cuba.....		36
Other countries.....		548
Total.....		392,398
Vegetable fibers and manufactures, other than cotton:		
United States.....		128,923
Germany.....		84,639
United Kingdom.....		44,771
France.....		12,571
Spain.....		8,002
Italy.....		1,148
Porto Rico.....		227
Cuba.....		63
Other countries.....		722
Total.....		281,066

¹"Other countries" here means Denmark and Netherlands principally.

Articles and countries.	Quantity.	Value.
Leather and manufactures of:		
United States.....	\$242, 509	
Germany.....	17, 203	
United Kingdom.....	6, 465	
Spain.....	5, 425	
France.....	1, 777	
Porto Rico.....	1, 652	
Italy.....	146	
Cuba.....	87	
Other countries.....	266	
Total.....	275, 530	
Fish, preserved, and fish products:		
United States.....	219, 687	
Germany.....	6, 260	
Spain.....	5, 575	
France.....	1, 692	
United Kingdom.....	1, 416	
Italy.....	457	
Porto Rico.....	44	
Cuba.....	20	
Other countries.....	2, 544	
Total.....	237, 695	
Chemicals, drugs, and dyes:		
United States.....	146, 097	
France.....	38, 298	
Germany.....	15, 152	
Italy.....	6, 690	
United Kingdom.....	2, 420	
Spain.....	1, 753	
Porto Rico.....	635	
Cuba.....	12	
Other countries.....	1, 777	
Total.....	212, 834	
Vehicles and boats:		
United States.....	159, 161	
Porto Rico.....	5, 163	
United Kingdom.....	579	
Germany.....	459	
Cuba.....	300	
France.....	25	
Italy.....	23	
Other countries.....	17, 534	
Total.....	183, 244	
Sugar, refined, and confectionery:		
United States.....	141, 331	
United Kingdom.....	8, 284	
Germany.....	4, 751	
Spain.....	3, 734	
France.....	3, 670	
Italy.....	774	
Cuba.....	301	
Porto Rico.....	157	
Other countries.....	375	
Total.....	163, 377	

Articles and countries.	Quantity.	Value.
Beer, bottled:	<i>Liters.</i>	
Germany.....	567,713	\$116,392
United States.....	180,501	27,042
United Kingdom.....	6,240	1,161
Spain.....	1,706	217
France.....	358	203
Cuba.....	900	150
Porto Rico.....	151	26
Other countries.....	13,232	1,991
Total.....	770,801	147,182
Agricultural implements:		
United States.....		105,147
Germany.....		33,883
United Kingdom.....		3,780
Spain.....		151
Italy.....		3
France.....		2
Porto Rico.....		1
Other countries.....		451
Total.....		143,418
Paper and manufactures of:		
United States.....		54,764
Germany.....		52,898
Spain.....		7,706
France.....		4,020
Italy.....		2,480
United Kingdom.....		1,054
Cuba.....		728
Porto Rico.....		317
Other countries.....		1,716
Total.....		125,683
Materials used in the manufacture of soap:	<i>Kilos.</i>	
United States.....	803,265	79,370
Germany.....	40,947	7,630
Porto Rico.....	9,159	1,288
United Kingdom.....	13,609	694
France.....	329	61
Other countries.....	76,809	14,946
Total.....	944,118	103,989
Coal:	<i>Tons.</i>	
United States.....	19,816	82,186
Porto Rico.....	272	1,722
United Kingdom.....	192	920
Other countries.....	2,136	10,943
Total.....	22,416	95,771
Breadstuffs, other than wheat flour:		
United States.....		76,715
Porto Rico.....		3,594
Germany.....		3,004
Italy.....		2,539
United Kingdom.....		1,943
France.....		1,939

-DOMINICAN REPUBLIC-
-COMMERCE - 1913
\$19,742,225.



Note.
Exports and imports of money not included

Countries and articles.	Quantity.	Value.
Breadstuffs, other than wheat flour—Continued.		
Spain.....		\$720
Other countries.....		1,074
Total.....		91,528
Wines and liquors:		
France.....		29,127
Spain.....		21,707
Germany.....		21,237
Italy.....		11,314
United States.....		1,376
United Kingdom.....		1,116
Porto Rico.....		174
Cuba.....		16
Other countries.....		3,621
Total.....		89,688
Hats and caps:		
Italy.....		57,055
United States.....		11,165
France.....		5,366
Porto Rico.....		4,957
Germany.....		3,478
Spain.....		2,889
United Kingdom.....		504
Cuba.....		321
Other countries.....		3,518
Total.....		89,253
Soap:		
United States.....	Kilos.	82,583
France.....		2,802
Germany.....		1,016
Porto Rico.....		1,107
Italy.....		650
United Kingdom.....		106
Spain.....		25
Cuba.....		2
Other countries.....		12,801
Total.....	Kilos.	86,884
Vegetables:		
United States.....		46,392
Spain.....		21,045
Porto Rico.....		9,041
France.....		1,841
United Kingdom.....		1,744
Germany.....		1,691
Cuba.....		1,455
Italy.....		632
Other countries.....		720
Total.....		84,561
Silk, manufactures of:		
United States.....		22,628
Germany.....		20,721
France.....		16,670

Articles and countries.	Quantity.	Value.
Silk, manufactures of—Continued.		
Italy.....		\$6,058
Porto Rico.....		3,348
United Kingdom.....		3,294
Spain.....		2,233
Cuba.....		17
Other countries.....		3,631
Total.....		78,600
Wool, and manufactures of:		
United States.....		27,401
Germany.....		23,227
France.....		8,264
United Kingdom.....		8,025
Porto Rico.....		4,540
Italy.....		4,071
Spain.....		1,047
Cuba.....		26
Other countries.....		1,319
Total.....		77,920
Metals and manufactures of, other than iron and steel:		
United States.....		52,831
Germany.....		9,081
United Kingdom.....		1,957
France.....		1,782
Spain.....		566
Porto Rico.....		521
Italy.....		39
Cuba.....		23
Other countries.....		2,832
Total.....		69,632
Jewelry, including watches:		
United States.....		27,475
Italy.....		15,102
Germany.....		8,640
France.....		2,629
United Kingdom.....		1,303
Cuba.....		182
Porto Rico.....		153
Spain.....		27
Other countries.....		1,416
Total.....		56,927
Paints, pigments, and colors:		
United States.....		41,415
United Kingdom.....		7,855
Germany.....		6,467
France.....		123
Porto Rico.....		82
Spain.....		67
Cuba.....		35
Italy.....		21
Other countries.....		8
Total.....		56,073

Articles and countries.	Quantity.	Value.
Glass and glassware:		
United States.....		\$29, 144
Germany.....		22, 189
United Kingdom.....		1, 585
France.....		965
Spain.....		284
Italy.....		213
Porto Rico.....		197
Other countries.....		753
Total.....		55, 330
Earthen, stone, and china ware:		
Germany.....		34, 493
United States.....		4, 992
United Kingdom.....		1, 567
France.....		419
Spain.....		199
Porto Rico.....		96
Other countries.....		3, 732
Total.....		45, 498
Perfumery and cosmetics:		
France.....		28, 963
United States.....		6, 827
Germany.....		3, 339
United Kingdom.....		1, 234
Spain.....		1, 081
Porto Rico.....		690
Italy.....		395
Cuba.....		1
Other countries.....		1, 246
Total.....		43, 776

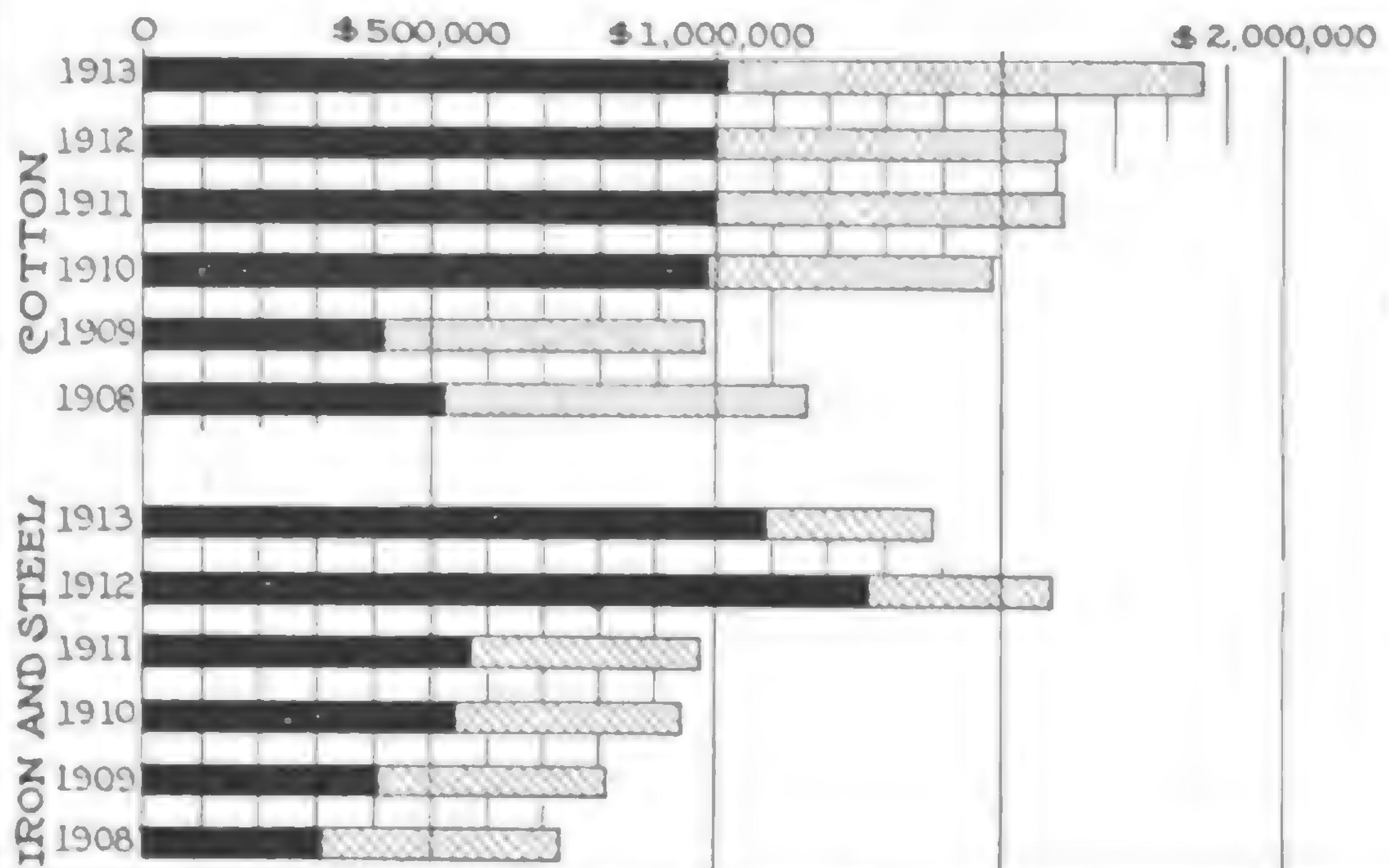
EXPORTS.

The exports for the last five years by countries of destination were as follows:

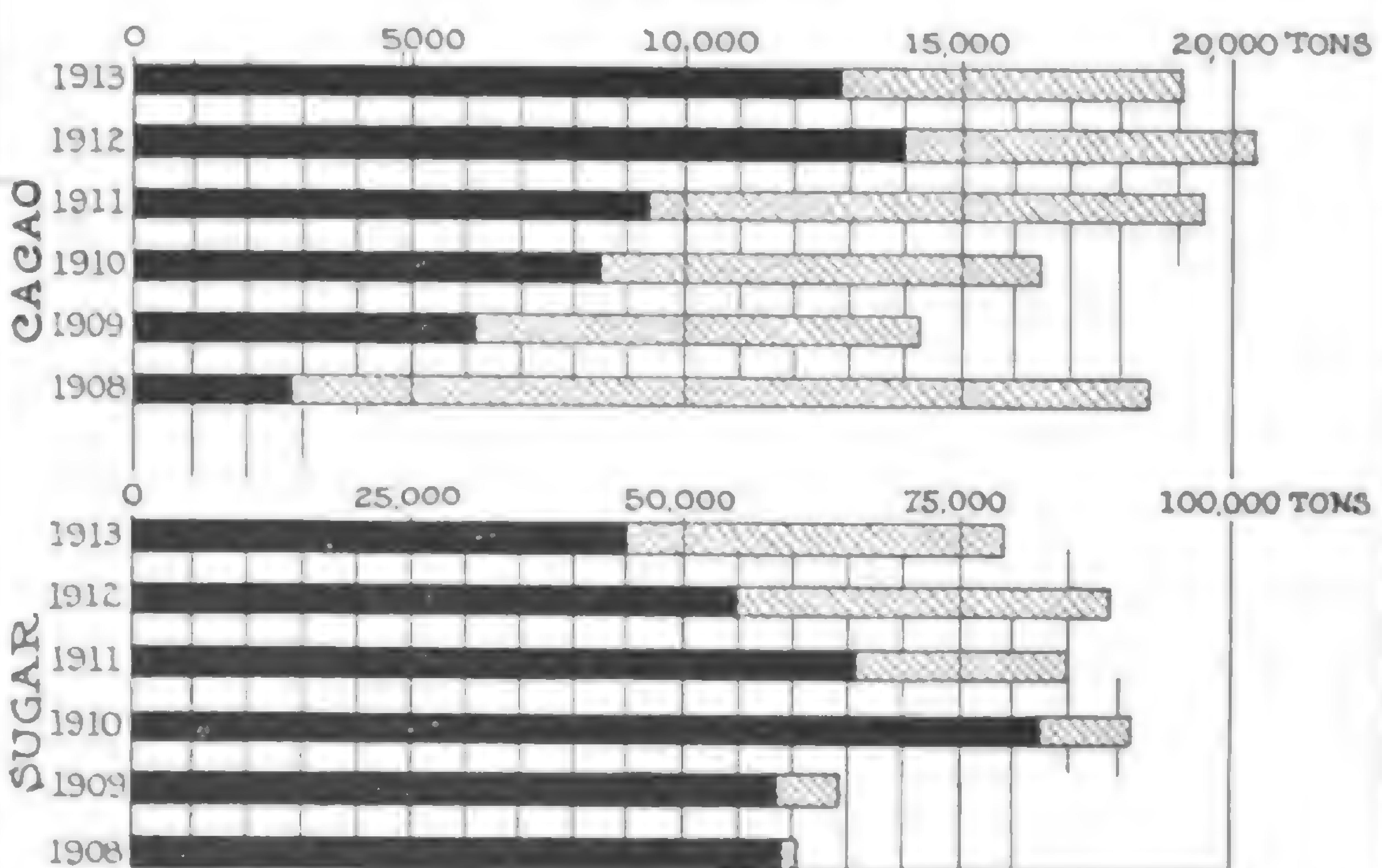
Countries.	1909	1910	1911	1912	1913
United States.....	\$4, 709, 354	\$7, 661, 303	\$5, 751, 464	\$7, 274, 606	\$5, 600, 768
Germany.....	2, 182, 127	2, 094, 033	2, 946, 858	1, 774, 049	2, 068, 384
France.....	924, 015	723, 834	1, 080, 706	933, 212	887, 907
United Kingdom.....	76, 915	141, 947	763, 881	1, 242, 980	241, 810
Porto Rico.....	16, 327	63, 443	51, 529	48, 220	28, 994
Cuba.....	10, 147	9, 115	20, 907	15, 429	27, 536
Italy.....	15, 616	22, 014	8, 897	26, 999	20, 430
Other countries.....	179, 189	133, 934	371, 304	1, 069, 753	1, 594, 118
Total.....	8, 113, 690	10, 849, 623	10, 995, 546	12, 385, 248	10, 469, 947

DOMINICAN REPUBLIC COMMERCE 1908-1913

IMPORTS



EXPORTS



Dark areas - UNITED STATES Light areas - OTHER COUNTRIES

PAN AMERICAN UNION

The exports by articles for the last five years were as follows:

Articles.	1909	1910	1911	1912	1913
Cacao.....	\$2,759,191	\$2,849,585	\$3,902,111	\$4,248,724	\$4,119,955
Sugar, raw.....	3,304,931	5,590,536	4,159,733	5,841,357	3,650,556
Leaf tobacco.....	1,239,486	958,441	1,421,424	670,337	1,121,775
Bananas.....	125,766	288,647	194,759	111,746	296,386
Coffee.....	128,202	323,749	319,142	566,167	257,076
Hides of cattle.....	70,996	123,732	104,303	122,391	152,496
Beeswax.....	123,769	148,804	165,317	148,700	118,038
Live animals.....	33,765	48,398	93,986	60,035	97,695
Honey.....	43,045	53,322	58,846	77,451	88,711
Goatskins.....	60,361	86,084	79,542	97,181	88,576
Cotton.....	{ 10,707	{ 17,674	{ 46,866	{ 101,298	{ 85,398
Vegetable fibers other than cotton.....					
Woods, other than specified.....	78,567	56,104	64,288	51,531	68,247
Mahogany.....	10,981	13,579	16,246	11,738	60,913
Lignum-vite.....	34,829	79,974	60,703	63,142	37,877
Drugs and dye materials.....	38,060	80,509	101,986	49,401	22,204
Coconuts.....	1,638	4,020	11,681	12,535	22,023
Cigars and cigarettes.....	16,768	22,103	35,730	11,820	15,168
Gums and resins.....	2,208	1,762	8,259	8,663	9,761
Copra.....	5,812	14,543	5,922	1,899	5,629
Other exports.....	24,608	80,212	125,156	110,870	134,361

The exports by articles and countries of destination for the year 1913 were as follows:

Articles and countries.	Quantity.	Value.	
		Kilos.	
Cacao: ¹			
United States.....	12,868,952	\$2,774,670	
Germany.....	3,295,178	675,233	
France.....	3,295,327	666,948	
United Kingdom.....	8,424	2,432	
Other countries.....	2,946	672	
Total.....	19,470,827	4,119,955	
Sugar, raw:			
United States.....	47,588,972	2,193,962	
United Kingdom.....	1,432,337	71,056	
Italy.....	90	8	
Other countries ²	29,828,066	1,385,520	
Total.....	78,849,465	3,650,556	
Leaf tobacco:			
Germany.....	9,136,274	1,019,602	
United States.....	129,733	23,648	
France.....	166,091	18,497	
Other countries.....	358,300	60,028	
Total.....	9,790,398	1,121,775	

¹ Final destination of shipments varies, as much cacao is exported subject to order, especially to the United States, from whence it is reshipped to other countries.

² "Other countries" here means Canada principally.

Articles and countries.	Quantity.	Value.
Bananas:		
United States.....	<i>Bunches.</i> 591,000	\$295,750
Other countries.....	1,804	636
Total.....	592,804	296,386
Coffee:		
France.....	<i>Kilos.</i> 566,279	134,584
United States.....	229,727	56,545
Germany.....	148,709	44,089
Italy.....	88,585	19,026
Cuba.....	11,625	1,924
United Kingdom.....	300	80
Other countries.....	3,697	828
Total.....	1,048,922	257,076
Hides of cattle:		
Germany.....	346,310	122,722
France.....	49,861	17,432
United States.....	28,396	11,612
Italy.....	1,141	275
Other countries.....	1,138	455
Total.....	426,846	152,496
Beeswax:		
Germany.....	172,898	95,441
United States.....	20,501	12,671
France.....	17,932	9,263
Other countries.....	1,241	663
Total.....	212,572	118,038
Live animals:		
Haiti.....		81,610
Cuba.....		8,490
Porto Rico.....		7,595
Total.....		97,695
Honey:		
Germany.....	<i>Gallons.</i> 264,538	76,909
France.....	19,134	5,412
United States.....	11,721	3,670
United Kingdom.....	3,715	1,180
Italy.....	634	220
Other countries.....	3,668	1,320
Total.....	303,410	88,711
Goatskins:		
United States.....	<i>Kilos.</i> 112,493	86,921
Germany.....	215	215
Porto Rico.....	1,600	1,440
Total.....	114,308	88,576
Cotton:		
United Kingdom.....	162,113	58,166
France.....	77,489	26,256
United States.....	2,569	970
Other countries.....	50	6
Total.....	242,221	85,398

Articles and countries.	Quantity.	Value.
Vegetable fibers other than cotton:		
Cuba.....		\$17, 102
Total.....		17, 102
Woods other than specified:		
United Kingdom.....		25, 821
United States.....		19, 136
Porto Rico.....		12, 304
Germany.....		5, 217
France.....		5, 131
Italy.....		3
Other countries.....		635
Total.....		68, 247
Mahogany:	<i>Tons.</i>	
United Kingdom.....	2, 688	47, 163
United States.....	286	10, 477
Germany.....	81	1, 203
Other countries.....	163	2, 070
Total.....	3, 218	60, 913
Lignum-vitæ:		
United States.....	1, 910	31, 620
United Kingdom.....	112	2, 847
France.....	68	1, 331
Italy.....	42	898
Germany.....	19	267
Porto Rico.....	10	144
Cuba.....	1	20
Other countries.....	55	750
Total.....	2, 217	37, 877
Drugs and dye materials:		
Germany.....		14, 699
United States.....		6, 865
France.....		380
United Kingdom.....		260
Total.....		22, 204
Coconuts:	<i>Kilos.</i>	
United States.....	766, 273	19, 157
Germany.....	149, 273	2, 148
France.....	42, 547	718
Total.....	958, 093	22, 023
Cigars and cigarettes:		
United Kingdom.....		95
United States.....		33
Other countries ¹		15, 040
Total.....		15, 168
Gums and resins:		
United States.....	11, 050	4, 311
Germany.....	7, 437	3, 288
United Kingdom.....	8, 288	2, 162
Total.....	26, 775	9, 761

¹ "Other countries" here means Haiti principally.

Articles and countries.	Quantity.	Value.
	Kilos.	
Copra:		
United States.....	33,663	\$3,332
Germany.....	27,483	2,117
France.....	4,364	180
Total.	65,510	5,629
Other exports:		
United States.....	45,418	
United Kingdom.....	30,548	
Porto Rico.....	7,511	
Germany.....	5,234	
France.....	1,775	
Other countries.....	43,875	
Total.	134,361	

The following tables show the entrances and clearances of steamships and sailing vessels engaged in foreign trade during the year 1913 at the nine Dominican ports:

ENTRANCES.

Ports.	Steamships.				Sailing vessels.			
	With cargo.		In ballast.		With cargo.		In ballast.	
	Number.	Regis- tered. tonnage.	Number.	Regis- tered. tonnage.	Number.	Regis- tered. tonnage.	Number.	Regis- tered. tonnage.
Azua.....	1	689	13	11,770	1	76	11	1,542
Barahona.....	1	1,175	.....	.....	5	405	13	999
La Romana.....	11	9,211	8	4,074	8	1,490	.....	.....
Macoris.....	40	43,293	32	27,217	19	6,838	41	3,898
Monte Cristi.....	38	84,577	11	20,896	.....	.....	11	80
Puerto Plata.....	66	123,920	65	86,621	12	881	30	459
San Juan.....	.....	.....	1	1,892	2	521	2	96
Sanchez.....	11	23,575	5	11,078	7	1,589	.....	.....
Santo Domingo.....	45	54,806	31	25,889	35	5,396	12	907
Total.	213	341,246	166	189,437	89	17,196	120	7,981

CLEARANCES.

	Number.	Regis- tered. tonnage.	Number.	Regis- tered. tonnage.	Number.	Regis- tered. tonnage.	Number.	Regis- tered. tonnage.
Azua.....	1	689	14	12,476	29	3,130	.....	.....
Barahona.....	1	307	.....	.....	24	1,913	3	229
La Romana.....	12	12,771	2	1,126	.....	.....	1	1,204
Macoris.....	39	32,141	24	23,903	4	3,937	47	4,501
Monte Cristi.....	30	64,215	15	33,141	1	679	10	47
Puerto Plata.....	54	73,675	19	24,201	4	480	35	3,770
San Juan.....	2	4,790	1	1,892	1	69	1	27
Sanchez.....	19	40,171	1	1,704	.....	.....	2	1,113
Santo Domingo.....	30	36,790	45	47,136	18	2,209	20	3,991
Total.	188	265,549	121	145,579	81	12,417	124	14,942



SUBJECT MATTER OF CONSULAR REPORTS

REPORTS RECEIVED UP TO APRIL 25, 1914.¹

Title.	Date.	Author.
ARGENTINA.		
Publication "Direccion General de Estadistica".....	1913. Nov. 20	R. M. Bartleman, consul general, Buenos Aires.
Bones—shipments to United States, 1912.....	1914. Feb. 9	William Dawson, jr., consul, Rosario.
Imports of automobiles, 1912-13.....	Feb. 7	R. M. Bartleman, consul general, Buenos Aires.
Market for men's neckware.....	do.....	William Dawson, jr., consul, Rosario.
Market for dairy machinery.....	do.....	Do.
Zinc ores (none mined).....	Feb. 11	Do.
"Shells" for trap shooting.....	do.....	Do.
California redwood lumber.....	Feb. 12	Do.
Imports of coal, 1912.....	Feb. 14	Do.
Stoves, imports for 1912.....	Feb. 17	Do.
Automobiles and supplies.....	Feb. 18	Do.
Fibered asphalt and tannic acid.....	Feb. 19	Do.
Treated timber for structural material (little market as quebracho is used).....	do.....	Do.
Soda fountains (none in Rosario)—Market for machin- ery for bottling and manufacturing soda water— Duties.....	Feb. 20	Do.
Suction sweepers (no demand).....	do.....	Do.
Commerce of Argentina in 1913.....	Feb. 27	R. M. Bartleman, consul general, Buenos Aires.
Printing and printers' tools.....	do.....	William Dawson, jr., consul, Rosario.
Agricultural machinery (little demand for heavy ma- chinery).....	Mar. 2	Do.
Oil tanks (little market, as all oils are imported incans).....	do.....	Do.
Asbestos-lined irons with detachable handles (little market).....	do.....	Do.
BRAZIL.		
Portable wooden houses.....	Feb. 14	Albro L. Burnell, vice consul general Rio de Janeiro.
Dealers in automobile accessories.....	Feb. 16	Do.
Moving-picture houses.....	Feb. 18	Do.
Government officials having charge of small arms and equipment.....	Feb. 19	Do.
Electrical machinery.....	do.....	Do.
Disease of cattle.....	Feb. 20	Do.
Veneering business (climate against it).....	do.....	Do.
Pruning knives.....	Feb. 21	Do.
Printing establishments, printers' tools, duty on cata- logues and literature for advertising purposes.....	do.....	Do.
Cigars.....	Feb. 24	Do.
Shipping rebates.....	do.....	Do.
Boy Scout movement in Rio de Janeiro.....	Mar. 2	Do.
Electric signs for advertising.....	Mar. 3	Do.
Railroad conditions in Brazil, in regard to employment of American railroad men.....	Mar. 4	Do.
Gasoline, kerosene, oil, and greases.....	do.....	Do.
Brazilian Government publications.....	do.....	Do.
Imports of coal, 1911-12.....	Mar. 5	Do.
Duty on motorcycles.....	Mar. 6	Do.
Nuts, used in joining iron rails.....	Mar. 10	Do.
Standard Guide and Handbook to Rio de Janeiro.....	do.....	Do.
Machinery.....	Mar. 11	Do.
Men's ready-made clothing—Imports of wearing ap- parel in 1912.....	Mar. 19	Do.
Moving pictures.....	do.....	Do.
Vulcanized fiber (little market).....	Mar. 20	Do.
Irrigation and construction work.....	do.....	Do.
Port works.....	do.....	Do.
Laundry business in Rio de Janeiro.....	do.....	Do.
Ice-cream soda (little known).....	do.....	Do.
School supplies.....	do.....	George H. Pickerel, consul, Para.
Coal imports at Para, 1911, 1912, 1913.....	Mar. 21	Do.
License for sale of proprietary medicines.....	Mar. 23	Albro L. Burnell, vice consul general, Rio de Janeiro.
Automobiles—Duties.....	Mar. 25	Do.

¹ This does not represent a complete list of the reports made by the consular officers in Latin America, but merely those that are supplied by the Pan American Union as likely to be of service to this organization.

Reports received up to April 25, 1914—Continued.

Title.	Date.	Author.
CHILE.		
Annual commercial and industrial district report, 1913.	1914.	
Beer and hops.....	Feb. 17	Alfred A. Winslow, consul, Valparaiso.
Printers' supplies.....	Feb. 19	Do.
Shoes (growing demand for American shoes).....	do.....	Do.
Quillai bark.....	Feb. 21	Do.
Coke and coal, imports for 1911-12.....	Mar. 2	Do.
	Mar. 3	Do.
COLOMBIA.		
Duty on proprietary medicines, under new tariff law of Dec. 6, 1913.	Feb. 14	Leland Harrison, chargé d'affaires, Bogota.
Annual report of commerce and industries for 1913.....	Mar. 3	Henry P. Starrett, consul, Cartagena.
Yield of flour from American wheat.....	Mar. 25	Isaac A. Manning, consul, Barranquilla.
Timber lands in Colombia.....	Apr. 1	Do.
COSTA RICA.		
Comparative tables of declared exports, 1912-13.....	Mar. 10	Samuel T. Lee, consul, San Jose.
CUBA.		
Annual report of commerce and industries, 1913.....	Mar. 12	Max B. Baehr, consul, Cienfuegos.
List of manufacturers of candles, wax matches, soap, paper, etc.	Mar. 18	R. E. Holaday, consul, Santiago.
Automatic fire extinguishers—Building and insurance conditions—List of insurance companies.	Mar. 19	Do.
Flour consumption.....	Mar. 20	Do.
List of soap manufacturers—Tanning.....	Mar. 21	Denn R. Wood, consular agent, Nuevitas.
DOMINICAN REPUBLIC.		
Stoves.....	Feb. 27	Frank Anderson Henry, consul, Puerto Plata.
Pumps and windmills.....	Feb. 28	Charles H. Albrecht, vice and deputy consul, Santo Domingo.
Excavating and mining machinery.....	Mar. 5	Wm. Walker Smith, consul general, Santo Domingo.
Disinfectants and other sanitary appliances—List of druggists in north of Republic.	Mar. 8	Frank Anderson Henry, consul, Puerto Plata.
Coal consumption in 1912—List of importers.....	Mar. 10	Charles H. Albrecht, vice and deputy consul, Santo Domingo.
Beer.....	Mar. 12	Do.
Concrete mixers and machinery.....	Mar. 14	Do.
List of importers of hardware—List of commission merchants in Santo Domingo.	do.....	Do.
Lumber imports and list of lumber importers.....	Mar. 25	Do.
Shoos (little market).....	do.....	Frank Anderson Henry, consul, Puerto Plata.
Fire extinguishers.....	Mar. 26	Do.
Cultivation of castor-oil beans and sea-island cotton.....	Mar. 28	Do.
ECUADOR.		
Market for paper of all classes—Imports for 1910-11.....	Feb. 24	Frederic W. Goding, consul general, Guayaquil.
Some Ecuadorian imports for 1912-13.....	Feb. 28	Do.
Railways and highways of Ecuador.....	Mar. 13	Do.
Trans-Amazon Railway of Ecuador.....	Mar. 15	Do.
Ecuador tobacco monopoly.....	Mar. 18	Do.
GUATEMALA.		
Fire extinguishers.....	Mar. 21	William Owen, vice and deputy consul general, Guatemala City.
Lands, Department of Petén.....	Mar. 27	Do.
Leather imports in 1912.....	do.....	Do.
HAITI.		
Importers of hardware.....	Mar. 24	J. B. Terres, consul, Port-au-Prince.
Vehicles.....	Mar. 30	Lemuel W. Livingston, consul, Cape Haitien.
HONDURAS.		
Shoe findings. Automobile accessories.....	Mar. 4	B. D. Guilbert, vice and deputy consul, Tegucigalpa.
Firms and corporations engaged in mining.....	Mar. 12	Do.
Dealers in flour.....	Mar. 15	Do.
Lands (north coast).....	Mar. 17	Do.
Owners of cattle in district.....	Mar. 18	Do.

Reports received up to April 25, 1914—Continued.

Title.	Date.	Author.
HONDURAS—continued.		
Liquor dealers.....	1914. Mar. 18	B. D. Guilbert, vice and deputy consul, Tegucigalpa.
Printers' tools, supply houses.....	Mar. 20	<i>Do.</i>
Vulcanized fiber—List of firms that might be interested.....	do.....	<i>Do.</i>
Fruits.....	Mar. 31	Lynn W. Franklin, vice and deputy consul, Tegucigalpa.
MEXICO.		
Annual report of Southern District of Lower California.....	Feb. 26	Lucien N. Sullivan, consul, La Paz.
Automobiles and accessories.....	Feb. 27	Wilbur T. Gracey, consul, Progreso.
Automobiles (few used).....	Mar. 4	Gaston Schmutz, consul, Aguascalientes.
Refrigerating machines.....	Mar. 6	A. J. Lepinasse, consul, Frontera.
Annual report of commerce and industries, 1913.....	do.....	Gaston Schmutz, consul, Aguascalientes.
Do.....	Mar. 7	Wilbert L. Bonney, consul, San Luis Potosi.
Exporters of henequen in Progreso.....	do.....	Wilbur T. Gracey, consul, Progreso.
Motion-picture films.....	do.....	<i>Do.</i>
Fertilizer (no market).....	Mar. 9	Wm. W. Canada, consul, Vera Cruz.
Names of schools and school-teachers.....	Mar. 11	Wm. E. Alger, consul, Mazatlan.
Hardware dealers.....	Mar. 13	Marion Letcher, consul, Chihuahua.
Narrow gauge railway to ancient Mayan Ruins of Chichen, from Progreso.....	Mar. 14	Wilbur T. Gracey, consul, Progreso.
Colonization scheme for State of Tabasco.....	do.....	<i>Do.</i>
New book on Yucatan, printed in Spanish.....	Undated	Alonzo B. Garrett, consul, Nuevo Laredo.
Commerce and industries, 1913.....	Mar. 14	John R. Silliman, vice consul, Saltillo.
List of institutions that might be interested in school supplies, and language phone method.....	Mar. 17	
Dairying industry.....	Mar. 18	Wm. W. Canada, consul, Vera Cruz.
List of teachers in district.....	do.....	Wilbert L. Bonney, consul, San Luis Potosi.
Vulcanized fiber and products.....	do.....	Clarence A. Miller, consul, Tampico.
Annual report of commerce and industries, 1913.....	do.....	Louis Hostetter, consul, Hermosillo.
Textbooks—List of schools and teachers.....	Mar. 19	Wm. W. Canada, consul, Vera Cruz.
Watches—Duties.....	Mar. 20	Wm. E. Alger, consul, Mazatlan.
Dealers in lumber and timber in district.....	Mar. 23	Wilbert L. Bonney, consul, San Luis Potosi.
List of schools and teachers who might be interested in engineering courses.....	do.....	<i>Do.</i>
Foodstuffs for cattle—List of firms.....	do.....	V. A. Emerson, consular agent, Puerto Mexico.
Tanners—Textiles—Soap manufacturers.....	Mar. 30	Gaston Schmutz, consul, Aguascalientes.
Tanning supplies.....	Apr. 4	Wilbur T. Gracey, consul, Progreso.
Manufacture of candles and textiles.....	do.....	Marion Letcher, consul, Chihuahua.
Annual report of commerce and industries for 1913.....	Apr. 6	William P. Blocker, vice consul, Ciudad Porfirio Diaz.
PANAMA.		
Local newsdealers selling American periodicals.....	Mar. 5	James C. Kellogg, consul, Colon.
Moving-picture theaters.....	Mar. 9	A. G. Snyder, consul general, Panama.
Fire extinguishers.....	Mar. 17	James C. Kellogg, consul, Colon.
Imports of pitch pine and pine lumber in 1912.....	do.....	<i>Do.</i>
Jewelry—List of local dealers.....	Mar. 20	<i>Do.</i>
Cultivation of broom corn in Colon Province.....	Mar. 26	<i>Do.</i>
Annual report, commerce and industries.....	Mar. 30	A. G. Snyder, consul general, Panama.
PERU.		
World's production and consumption of copper.....	Feb. 16	Luther K. Zabriskie, vice consul, Callao.
Peruvian Santo Domingo mine.....	do.....	<i>Do.</i>
Foreign physicians and dentists.....	Mar. 31	William W. Handley, consul general, Callao.
URUGUAY.		
Annual report of a Montevideo bank	Mar. 18	Ralph J. Totten, consul, Montevideo.
VEZUELA.		
Importation of laundry soap, belting, lead pencils, hosiery.....	Feb. 20	Thomas W. Voetter, consul, La Guaira.
No official book bindery in Venezuela.....	Feb. 25	<i>Do.</i>
Furniture.....	Mar. 6	John K. Baxter, consul, Maracaibo.
Soda fountains.....	Mar. 10	<i>Do.</i>
List of newspapers and names of publishers.....	do.....	<i>Do.</i>
Lumber (little imported).....	do.....	<i>Do.</i>
Tonca beans.....	Mar. 10	Thomas W. Voetter, consul, La Guaira.
Motor cycles	Mar. 11	<i>Do.</i>

Reports received up to April 25, 1914—Continued.

Title.	Date.	Author.
VENEZUELA—continued.		
Stoves and ranges.....	1914. Mar. 12	Thomas W. Voetter, consul, La Guaira.
Development of Western Venezuela.....	do.....	John K. Baxter, consul, Maracaibo.
Beer production and consumption of hops, 1912-13.....	do.....	Do.
Rock or ore crushing machinery.....	do.....	Do.
Duties on silk wearing apparel.....	Mar. 13	Thomas W. Voetter, consul, La Guaira.
Sacks made from "Fique"—Price—Firms dealing in same.	Mar. 14	Do.
Mining in State of Bolivar.....	Mar. 17	Do.
Automobiles.....	do.....	Do.
List of houses handling shoe finding and automobile accessories.	do.....	Do.
Hotels.....	do.....	Do.
Flour imports—List of importers.....	Mar. 18	Do.
Moving pictures.....	Mar. 19	Do.
Notes of Puerto Cabello.....	Mar. 20	Herbert R. Wright, consul, Puerto Cabello.
Watches—Duties—List of jewelers.....	Mar. 21	John K. Baxter, consul, Maracaibo.
Dealers in cordage.....	Mar. 23	Thomas W. Voetter, consul, La Guaira.
Pine lumber imports.....	do.....	Do.
Electrical material (no dealers outside of companies operating plants).	Mar. 24	Do.
Duty on "Vulcanized fiber".....	Mar. 25	Do.
Sale of insecticides and fungicides.....	Mar. 26	Do.
List of tanners.....	do.....	Do.
Duty on saddle pads or blankets—Dealers in leather goods, saddlery, and harness makers.	Mar. 27	Do.
Electric light fixtures.....	do.....	Do.
Soda fountains (none yet introduced).....	do.....	Do.
Brooms and brushes.....	Mar. 28	Do.
Duties on "periodicals for industrial propaganda"—List of newsdealers at Caracas.	Mar. 31	Do.
Port works—Government work rarely done by contract.....	do.....	Do.
California products.....	Apr. 2	Do.



Courtesy Collier's Weekly.

VIEW OF THE PANAMA-PACIFIC INTERNATIONAL EXPOSITION GROUNDS TAKEN FROM AN AEROPLANE.

ARGENTINE REPUBLIC

The EXPENSE BUDGET of the Argentine Republic for the year 1914 aggregates 449,570,900 pesos national currency (\$193,315,487). The sum allowed for the expenses of Congress, the different departments of the Government, pensions, retirements, and military expenditures amounts to 346,525,467 pesos national currency (\$149,005,950).—A law imposing a tax on ALCOHOLIC BEVERAGES, promulgated on January 3 last, became operative in April 1914. Under this law all beverages having a content of more than 10 per cent of alcohol, not including wines, are classified as alcoholic beverages, and on leaving the fiscal storehouses or factories are subject to internal-revenue taxes, the amount of the tax to be affixed on the bottles or other receptacles in revenue stamps. The tax varies from 5 centavos per bottle to 1 peso per bottle according to the proportion of alcohol contained.—During the years 1910 to 1913, inclusive, the Argentine Government bored 39 WELLS in different parts of the country, the average depth reached being 252 meters. The deepest boring was 1,600 meters and the shallowest 33 meters. In a number of instances artesian water was found, in other borings salt water; in two of the wells indications of petroleum were encountered, and in more than 20 of the shafts good water in abundance was obtained. In parts of the Province of Tucuman, where surface water is very scarce and where it was thought that no available water supply existed, water was encountered at a comparatively small depth. At Santa Rosa in the Province mentioned artesian water was found in abundance at a depth of 136 meters, and three of the shafts, after the tubing was sunk, produced from 85,000 to 97,000 liters of water per hour, the water rising to a height of more than one meter above the surface.—According to statistics compiled by the Rural Economic and Statistical Bureau the area planted to INDIAN CORN in the Argentine Republic for the year 1913-14, comprises 4,132,000 hectares, 1,822,000 hectares of which are in the Province of Buenos Aires, 1,250,000 in the Province of Santa Fe and 600,000 hectares in the Province of Cordoba.—The municipality of Buenos Aires has concluded a LOAN of £2,460,300 (\$11,957,058) with London bankers. The first installment of £1,000,000 (\$4,860,000) was payable on March 1 last, and a second installment of £1,296,000 (\$6,298,560) will be due on August 15 of the present year.—The value of merchandise IMPORTED FREE into the Argentine Republic in 1913 was 127,620,996 gold pesos (\$54,877,028), as compared with 92,575,004 gold pesos (\$39,807,252) in 1912. In 1913 the free imports

of merchandise represented about 30 per cent of the total imports.—The new Argentine VESSEL *Puerto Itati*, constructed at the Bica del Riachuelo shipyards and fitted up to use oil for fuel, is the first vessel of its kind to be built in the Argentine Republic to ply between Montevideo and Asuncion. This vessel carried 550 tons of freight on its maiden trip.—The Social Argentine Museum will present Col. Theodore Roosevelt with an exclusively ARGENTINE LIBRARY, the books and other matter to be selected upon the recommendation of the board of directors of that institution. The library is to be given Col. Roosevelt so that he may have at hand complete information concerning the Argentine Republic for use in such articles as he may prepare on that country. The library comprises more than one thousand volumes, together with numerous photographs, maps, albums, etc. Sr. Alejandro Guastavino has been commissioned to go to the United States to deliver the library to Col. Roosevelt in the name of the museum.—In four months ending January 31, the United States received from Argentina 24,434,977 pounds of chilled and FROZEN BEEF, which was about 58 per cent of the total amount arriving in the United States; the remainder coming from Australia, New Zealand, Uruguay, Canada, and Mexico. This statement is based on the investigations of George K. Holmes, of the United States Department of Agriculture, who has contributed an extensive article on the subject to the National Provisioner, of April 18. The same authority places the number of cattle in Argentina at 29,016,000.—The association of telegraphers of the Argentine Republic, has started a voluntary subscription among the members of the craft and other interested persons residing in Argentina, to raise funds for the purpose of erecting a MONUMENT in Buenos Aires to Prof. Morse, the inventor of the Morse alphabet and system of telegraphy.—There are 57 MILITARY SCHOOLS in the Argentine Republic, which gave instruction, during the school year 1913-14, to 17,344 enlisted men, 8,417 of whom were enrolled for regular courses of instruction.—The production of WINE in the Argentine Republic in 1913 was 5,000,000 hectoliters, 4,000,000 of which came from the Province of Mendoza and 750,000 from the Province of San Juan. This is an increase of 20 per cent over the production of 1912.—In 1913 SUGAR was produced in the Province of Tucuman to the amount of 221,004 tons.—In January of the present year there were 11,174 marriages, 4,447 births, and 2,198 deaths in the Federal Capital.—Under the irrigation laws now in force in the Argentine Republic, 22 IRRIGATION projects have been completed or are under construction, the estimated cost of which is 28,594,718 pesos (\$12,295,728). Provision has been made to expend on these projects 4,130,932 pesos (\$1,776,300) in 1915, and 3,500,000 pesos (\$1,505,000) in 1916.



BOLIVIA

A law promulgated on January 17, 1914, allows the free exportation of COPPER ORES in bulk and of copper ores not concentrated. The same law imposes an export tax on bismuth. The exports of the by-products of copper and bismuth smelters shall pay an export tax of 45 per cent of the respective taxes on bars and ingots. Unconcentrated or untreated bismuth ores are subject to the export taxes less 75 per cent of the tariff on bars or ingots.—The export tax on CATTLE HIDES from the department of Oruro has been fixed at 2 bolivianos (\$0.778) per hide.—The Congress of Bolivia has passed a law imposing a tax of 10 centavos (\$0.0389) per Spanish quintal on LIME manufactured in the department of La Paz.—A decree of January 29 of the present year regulating the law of January 3, 1914, which imposes a TAX of 3 per cent on the amount of transfers of real property for a valuable consideration, prohibits the recording of such transactions in Bolivia before the payment of the tax referred to.—A law has been promulgated creating a special RAILWAY GUARANTEE fund to cover interest and amortization of bonds issued for the construction of Bolivian railways. This law provides that there shall be set aside annually in the national budget not less than £100,000 (\$486,000) to the credit of the railway guarantee fund. The fund is also to be credited with 25 per cent of any savings that may be effected in the expenses of the different departments of the Government. The accumulations of this fund may be placed in banks in Europe or in Bolivia, as may be deemed expedient.—It is estimated that there are 80,000 head of wild CATTLE and 20,000 head of domestic cattle in the department of Santa Cruz. In the department of Beni the number of wild cattle is calculated at 130,000 head and the number of domestic cattle at 50,000 head.—Two large factories have recently been installed in the department of Beni to engage in the manufacture of ALCOHOL. These factories are also equipped for the manufacture of sugar. The use of alcohol by small vessels to generate motive power is becoming more and more general on the Beni River and its tributaries, the annual quantity of alcohol consumed for this purpose being estimated at 240,000 liters.—El Norte, a daily newspaper of La Paz, has published extensive data concerning the manufacture of Portland CEMENT in Bolivia, and has come to the conclusion that a plant having a capital of 350,000 bolivianos (\$136,150) would be able to manufacture enough to supply the needs of the country. Recently a company was organized in Bolivia with a capital of 100,000 bolivianos (\$38,900) for the purpose of engaging in the manufacture of this product. This company is now manufacturing on a small scale an

excellent quality and is selling it in the Bolivian market at about half the price of the imported article.—The Huanuni RAILWAY has been opened to public traffic. The line runs through the rich Huanuni mining region to Machacamarca.—Señor Don Adolfo Ballivian, consul general of Bolivia in New York, has compiled figures showing that in January, 1914, 5,819 packages of MERCHANDISE, weighing 397,327 kilos, valued at \$10,218.81, were shipped from the port of New York to Bolivia. These shipments consisted of machinery, gasoline, kerosene, cotton goods, groceries, liquors, drugs, hardware, and sundry merchandise, most of which entered Bolivia through the ports of Mollendo, Peru, and Antofagasta, Chile. In February, 1914, the shipments of merchandise from New York to Bolivia aggregated 10,193 packages of similar merchandise, weighing 497,139 kilos, valued at \$94,242.41.

A decorative horizontal banner with a floral and scrollwork border. The word "BRAZIL" is centered in a bold, serif font within the banner.

The department of public works of the Government of Brazil has sanctioned a number of requests for the installation of WIRELESS telegraphy aboard merchant vessels.—According to a recent message of the governor of the State of Curityba, the REVENUES of that Commonwealth for 1914 are estimated at 8,689 contos (\$2,-815,236). The expenditures in 1913 of the State referred to were 6,824 contos (\$2,265,568).—In January, 1914, IMMIGRANTS to the number of 3,709 arrived at the city of Rio de Janeiro.—The Sao Paulo daily papers state that negotiations have commenced for the sale of three important RAILWAYS of that Commonwealth. Should the negotiations be successful, the State treasury will be enriched to the amount of about £6,000,000 (\$29,160,000).—The aviator Darioli recently attained a height of 2,700 meters in exhibitions given at Rio de Janeiro. The naval AVIATION SCHOOL in the Federal Capital is soon to occupy its new building. The apparatus used in the school were purchased in the United States and are of the most modern type.—The construction of WORKMEN'S HOUSES in the city of Rio de Janeiro and vicinity, work on which was temporarily suspended, has been resumed and will be actively carried forward under the direction of Lieut. Serra Pulcherio.—The population of SANTOS, according to a census just taken, is 90,000.—Telegraphic advice from the city of Sao Paulo says that the State of Sao Paulo has contracted for a LOAN of £4,200,000 (\$20,412,000).—Funds aggregating 8,000 contos (\$2,592,000)

have been provided for continuing the construction of the Serra Mai to Uberaba RAILWAY.—A company has been organized at Sao Paulo with a capital of 2,000 contos (\$648,000) to engage in the STOCK business in the States of Minas Geraes and Goyaz.—The concession for the use of the Paulo Alfonso WATERFALLS for generating electric power has been annulled.—A decree promulgating the MARITIME CONVENTIONS, signed in Brussels in 1910, was published in February last.—In the neighborhood of Lake Colico 3,000 native families of agriculturists have recently settled as COLO-NISTS.—The President of Brazil has authorized the Santa Cruz RAILWAY Company, Limited, an English corporation with headquarters in London, to do business in the Republic.—In 1913 Brazil exported to the Argentine Republic MERCHANDISE to the value of \$8,935,115 and imported from that country products worth \$23,458,295. Brazil's trade with the Argentine Republic in 1913 amounted to more than three times that of any other Latin American country. Among the imports from the Argentine Republic during the year referred to were 26,933 head of cattle, 1,403 head of horses, 9,922 head of sheep, 219 tons of unwashed sheepskins, 3 tons of salted hides, 21,187 tons of jerked beef, 2,724 tons of tallow and lard, 5,657 tons of oats, 753 tons of flaxseed, 15,176 tons of maize, 27,520 tons of hay, 411,342 tons of wheat, 99,869 tons of wheat flour, and 1,582 tons of bran and shorts.—At the general ELECTION held in Brazil on March 1 last Wenceslao Braz and Urbano dos Santos were elected President and Vice President, respectively, of the Republic.



CHILE

Dr. Johannes Brüger, a noted geologist who was employed by the Government of Chile to study the COAL deposits of the Republic, states that there is enough coal in the carboniferous region of the Province of Arauco to supply the needs of Chile for a period of 200 years. This expert, who last year carefully examined the northern part of the Province of Arauco, found practically inexhaustible coal deposits, the richest and most extensive of which are in the coast region of the Province. In the neighborhood of the town of Buena-Piden there is an abundance of coal. These deposits were exploited on a large scale some years ago, and railways and wharves were constructed to facilitate the mining and shipping of the product. Work was, however, suspended because a fault was encountered in the vein, sufficient search not having been made to discover the con-

tinuation of the deposit, which in reality was but a short distance away. In the vicinity of Lavapie the Pacific Ocean has laid bare coal veins along the beach for a considerable distance. The hills in the neighborhood of Ronquié, Mislongue, and Millaneco contain large deposits of an excellent quality of coal. The coal mines now in operation in the Province of Arauco by the Curanilahue Co., and the Porvenir and Victoria mines, have immense supplies of coal which will last for many years. From Curanilahue to Pipilco and from Cuyineo to Temuco (Caramavida) coal outcroppings can be traced scarcely without a break, and the vein between the last two places is 1 meter 30 centimeters thick, the coal being of good quality and free from deleterious foreign substances. In a word, it is estimated that the region north of a line drawn between Lebu and Temuco (Caramavida) contains enough coal for the consumption of Chile for about two centuries. South of this line there is but little coal, and some of that is of such poor quality as to be practically worthless for commercial purposes. All that is now lacking for a greater utilization of the coal deposits of the Province of Arauco is better transportation facilities. The Province of Arauco also has small deposits of iron, and along its rivers and streams, which rise in the Nahuelbuta cordillera, rich gold placers are found.—The President of the Republic of Chile has been authorized by Congress to contract, within a period of one year, a LOAN of £200,000 (\$972,000), guaranteed by the Federal Government, for account of the municipality of Antofagasta, at an annual rate of interest not exceeding 5 per cent and an annual accumulative amortization rate of not less than 1 per cent nor more than 2 per cent. The net proceeds of the loan are to be used as follows: £136,000 (\$660,960) for pavements and sidewalks; £37,000 (\$179,820) for the construction of a model market; £20,000 (\$97,200) for the extension and paving of Brazil Avenue to the Club-Hipico; £4,000 (\$19,440) for the construction of public works and the installation of municipal service at the port of Mejillones; £8,000 (\$38,880) in the construction of a municipal plant for the destruction of garbage, etc., and £2,000 (\$9,720) for the establishment of free municipal baths.—The BUDGET of the city of Antofagasta for charitable purposes in 1914 amounts to 290,000 pesos (\$78,000), a large part of which is for hospitals, cemeteries, etc.—A fund of 200,000 pesos (\$40,000) has been placed by Congress at the disposal of the President of the Republic, to be used in introducing measures for combatting the spread of contagious and infectious diseases.—Adolfo Momberg has been granted a 10-year concession to establish and operate an ELECTRIC light and power plant in the city of Temuco. Work must be commenced on the plant within six months.—The publication of a mining MAP of the

Vallenar and Freirina region, prepared by the Bureau of Mines and geography, has been authorized by the department of industry and public works.---A law has been promulgated appropriating 500,000 pesos gold (\$182,500) for preliminary work at the San Francisco EXPOSITION.---A committee has been appointed to formulate tentative plans for the celebration of a NATIONAL EXPOSITION in 1915 at Viña del Mar, near Valparaiso. One of the objects of the undertaking is to cater to the large tourist traffic which it is anticipated will come to Chile after the opening of the Panama Canal and during the San Francisco exposition.



A recent executive decree fixes the net estimate of the receipts of the federal BUDGET for the fiscal year 1914 at \$17,404,010 gold, and the expenditures at \$19,718,854 gold. The estimated expenditures are as follows: Department of Home Government, \$4,352,577.30; Foreign Relations, \$357,845.53; Finance, \$1,212,704; War, \$3,882,-489.52; Public Instruction, \$1,107,050.31; Treasury, \$5,112,695.74, and Public Works, \$3,693,492. The net amount of the special credit budget for the same year, for the issue of securities of the public debt, is fixed at \$2,882,850.---In compliance with customs tariff law 117, enacted in 1913, cigarettes, liquors, perfumes, etc., imported into the country, must bear REVENUE STAMPS. An issue of 5,000,000 of these stamps has been ordered printed by the Treasury Department.---On March 24 last, the date of the centenary of the death of Ricaurte at San Mateo, the President of the Republic inaugurated an ARMORY in Bogota.---The Department of Public Works has contracted with G. Porras to install two LIGHTHOUSES on the Atlantic coast of the Republic, namely, one in the shallow waters of Salmedina at the entrance of Cartagena Bay, and the other at Isla Fuerte on the route from Cartagena to the Atrato River. The Government agrees to pay \$36,000 for the erection of the lighthouses, both of which are to be completed within two years.---A plan has been proposed to erect in Bogota by popular subscription a STATUE in honor of Dr. Rafael Nuñez, an eminent Colombian writer and one-time President of the Republic.---An executive decree of April 2, 1914, provides that, in importing merchandise by PARCEL POST, the Departments of Antioquia, Bolivar, Boyaca, Cundinamarea, Huila, Magdalena, Santander, and Tolima, and the intendencies of Atrato and San Andres, shall be under the jurisdiction of the Atlantic cus-

tomhouses; the Departments of Caldas and Valle under the jurisdiction of the Buenaventura customhouse; the Department of Nariño and the special commissary of Putumayo under the Tumaco customhouse; the Department of Santander of the North under the customhouses at Cutuca and on the Atlantic; the Department of Cauca under the Buenaventura and Gapi customhouses; the special commissary of Arauca and the part of the Casanare territory up to the left bank of the river of that name under the Arauca customhouse; the rest of Casanare and the intendency of Meta under the Orocue customhouse. These divisions must be borne in mind by the postal authorities.—The National Government has decided not to make contracts with Governments to bring IMMIGRANTS into the country. Its policy is to induce persons who possess the required qualifications to come to Colombia as immigrants, facilitating their journey thither and contracting privately with them.—A new ASSESSMENT of the city of Bogota will be completed in June, 1914. It is estimated that the increase in the value of real property in the municipality over that of last year will be \$10,000,000.—There is soon to be issued in Bogota a monthly publication entitled "Colombia," similar to the best MAGAZINES of Europe and the United States. The publication will contain short stories by Colombian authors, and articles of general interest on science, arts, etc. The first number of the magazine will have 150 pages.—In 1913 there were exported from the Department of Antioquia 896 boxes, containing 50 dozen each, of Iraca HATS. Estimating the average price per dozen at \$21, which is a low estimate, makes the total value of these hats \$940,800.—In July, 1914, branches of the Southern RAILWAY to Tequendama Falls, to Anolaima, and to Girardot will be opened to public traffic.—The Federal Government has appropriated \$10,000 for the building of an AVENUE between the city of Santa Marta and the San Pedro Alejandrino villa.—In February, 1914, the work of extending the RAILWAY from Espinal to Chicoral was commenced. This line will connect with the Girardot to Espinal Railway.—A contract has been made with the Barranquilla TRAMWAY to change the tramcars at present in use for larger ones. Heavier rails are also to be laid, and electricity or some other motive power will take the place of animal traction.—According to newspaper reports a party of 25 persons has sailed from Switzerland for Colombia, where the various members propose to FORM A COLONY and engage in their respective occupations, or in other lines of work which the newer country may offer. The Swiss Republic with its crowded population could well afford to contribute some of its industrial workers to a country like Colombia, where opportunities in many lines are far greater than in Switzerland.



COSTA RICA

An AGRICULTURAL SCHOOL has been established at Las Mercedes plantation, 1 kilometer from Curridabat, near the city of San Jose, under the general supervision of Licentiate Luis Cruz Meza and the immediate direction of Prof. Gustavo L. Michaud, an experienced Costa Rican agronomist and educator. In addition to extensive and detailed theoretical and practical instruction in agriculture, the general education of the pupils who enter the school will not be neglected, inasmuch as the curriculum provides for instruction in morals, mathematics, bookkeeping, geography, history, elements of the sciences, and English and French. Candidates for admission to the school must be between the ages of 12 and 18 years, in good health, and of sufficient education to commence the studies included in the first year's course. Among the practical branches that will be taught in the school are the manipulation and use of agricultural machinery, elementary carpentering, blacksmithing, and bricklaying. During the first year a very limited number of matriculates will be received. A small tuition fee of 30 colones (\$13.95) will be charged each pupil during the first school year. The pupils will be required to live at the school, and the smallest charge possible will be made for board. The great object of the school is to make of the pupils practical farmers, able and willing to systematically engage in the development of the great agricultural resources of the Republic.—The municipal council of the city of Limon has appointed Manuel Gonzalez Zeledon its financial agent in the United States and Europe, with headquarters in New York. The city desires to negotiate a LOAN of \$150,000 United States gold, to be used in consolidating the municipal debt and for public improvements. The financial agent is authorized to contract this loan for a period of not less than 20 years and at a rate of interest not exceeding 8 per cent per annum. The city offers its water and other revenues as a guaranty for the repayment of the loan.—The printing office of the Government of Costa Rica will print 800 copies of a book celebrating the hundredth anniversary of the birth of JUAN RAFAEL MORA, a Costa Rican patriot and sometime President of the Republic. Copies of this book are to be presented to many of the public men of Central America.—The English TOBACCO Factory at San Jose, which recently bought the Palmares tobacco plantation, has begun the cultivation of tobacco in some of the richest zones of the Province of Cartago. The factory referred to imports considerable quantities of foreign tobacco to be worked up into the manufactured product, and especially for the

manufacture of cigarettes. The factory now proposes to raise its supply of tobacco in Costa Rica, and has arranged to bring experts from Cuba and Jamaica to superintend the plantations of the company. It is said that tobacco of a quality rivaling the famous Cuban product can be grown in Costa Rica.—Representatives of German capitalists have recently visited Colorado and Tortuguero with the supposed object of reporting upon the feasibility of making one of these places the terminal of a railway planned to be built into the Sarapiqui and other regions of the Republic. No definite decision has yet been arrived at, but it is predicted that the report of the investigating engineers will be of such a favorable nature as to insure the investment of a large amount of capital in the enterprise.—The Republic of Costa Rica has entered into a PARCEL POST convention with Panama.—The REVENUES of the Government of Costa Rica in 1913 amounted to 9,612,230 colones (\$4,469,687). The estimated revenues for 1914 are 8,965,615 colones (\$4,169,011).—Preliminary negotiations are under way between the municipality of San Jose and French capitalists concerning a LOAN of 2,000,000 colones (\$930,000) with which to consolidate the municipal debt and pave the streets of the city.—A recent executive decree provides that when CATTLE are imported into the country triplicate invoices must be filed in the customhouse showing the number and value of the cattle. If imported via the northern frontier, shipment must be made through Agua Buena and the cattle given an arsenical bath, for which a charge of 10 centimes will be made.—Zebu cattle, brought from India and which are distinguished by having a hump similar to that of the camel, are being slaughtered for consumption in Costa Rica. The United Fruit Co. and other corporations have large numbers of these cattle on their plantations.



On April 6 last President Menocal delivered an interesting MESSAGE to the National Congress, in which he stated that the relations of the Republic to the other nations of the world were cordial and friendly. The Government of Italy has accredited an envoy extraordinary and minister plenipotentiary near the Government of Cuba in Habana, and the Government of Colombia has raised its chargé d'affaires to the rank of a minister resident. On December 27, 1913, the Government of the Dominican Republic accredited Fabio Fiallo chargé d'affaires of that country near the Government of Cuba. The President recommends that Congress take up the ques-

tion of reforming the diplomatic and consular service of the Republic, and the establishment of a Bureau of Information in the office of the department of state. Postal money-order conventions are being negotiated between Cuba, France, Chile, Great Britain and colonies, and Italy, while parcel-post conventions are being considered between Cuba and the United States, Costa Rica, Great Britain, Guatemala, Chile, Belgium, Italy, and Venezuela. The Government of Cuba is also negotiating for the concluding of commercial treaties with Chile, Venezuela, and Haiti, a general treaty with China, a treaty of amity and general relations with Colombia, and a consular convention with the Netherlands. A treaty of friendship, commerce, and navigation with Peru, and a treaty with the United States concerning lands and waters at Bahia Honda and Guantanamo are pending the approval of the Senate. The receipts from consular fees have increased from 1909 to 1913, as follows: 1908-9, \$355,666; 1909-10, \$412,206; 1910-11, \$443,191; 1911-12, \$618,403, and 1912-13, \$673,208. The President recommends an increase in the rural guard for the purpose of better policing the country, and favors a law authorizing the retirement of officers and men of the police department. The department of public works has commenced the construction of wagon roads and bridges. This department has outstanding debts amounting to \$1,626,846. The executive suggests the construction of new wharves with steel and concrete piers for the entire port of Habana. This would prevent the presence of rats in the wharves and minimize the probability of an outbreak of the plague. He also recommends the purchase of a vessel for buoy and lighthouse service and suggests that \$400,000 be appropriated for this purpose. An appropriation of \$120,000 is requested for the National Library. President Menocal states that from October 1, 1913, to February 28, 1914, 47,194 foreigners landed at the port of Habana, 22,604 of whom were immigrants. The reconstruction of Las Animas hospital is urged. The construction of elevated tramways in the city of Habana is opposed as insanitary and unnecessary in a city of the size of the Federal capital. The President requests an appropriation of \$50,000 for the purchase of two boats to be used in disinfecting the wharves at Habana and Santiago.—Fred Wolfe, a Habana stockman, selected LIVE STOCK in St. Louis, especially horses, for exhibition at the Habana stock fair which was held in Habana from April 11 to May 2. The Cuban Government distributed \$15,000 in prizes at this fair.—A \$224,000 contract for the rebuilding of the interior of the NATIONAL THEATER at Habana has been awarded to Purdy & Henderson, a firm of American contractors. The work must be completed by January 15, 1915.—“El Sol,” a daily NEWSPAPER recently established in Habana, is the first 1-cent newspaper published in the Republic.—The department of agriculture of the Government of

Cuba has contracted with Noel Deerr, of Hawaii, a chemical expert, to aid Cuban sugar-cane growers to improve their methods in the manufacture of sugar. Mr. Deerr will work at the different experiment stations, and proposes to visit all the mills and sugar-cane growing sections of the Island.—The Cuban SCHOOL SHIP *Patria* is booked for a cruise of 147 days with Cuban naval cadets. Sixteen different countries will be visited on the trip.—The Cuban Congress has placed \$40,000 at the disposal of President Menocal for use in the construction of a section of HIGHWAY near the town of Santa Cruz in the municipality of San Cristobal.

DOMINICAN REPUBLIC

The Hamburg-American steamship, Victoria Louise, recently visited Santo Domingo with 600 EXCURSIONISTS from the United States and elsewhere. This is one of the largest vessels making the Caribbean cruise, which is becoming more and more popular. The excursionists were delighted with the sights of the Dominican city and the people received them most hospitably, according to the Listin Diario, of Santo Domingo.—It is probable that several STUDENTS from the Dominican Republic will be sent to Peru to pursue certain studies in the institutions of the latter country. The step has been recommended by the Dominican minister in Caracas, Sr. Don Victor M. de Castro, and many Dominicans favor the movement, which would doubtless bring the two countries into closer friendship and business relations.—AVIATION in the Dominican Republic is attracting much attention, and the city of Santo Domingo has recently witnessed many daring feats in the air. The well-known North American airman, Frank Burnside, proved himself a wonderful flyer and delighted the crowds of people that assembled to witness his skill. He was presented a medal, and a banquet in his honor was attended by many of the most prominent citizens.—Two modern tractors for PLOWING LAND have been introduced in the Republic and are said to be giving complete satisfaction and creating much interest in the possibilities of further extending the use of tractors. Labor problems are important considerations and machines which can do the work of many men are destined to find increased sales as foreign capital develops various agricultural enterprises.—The WAGES OF LABORERS along the Haitian boundary are about 40 cents a day, but with increasing distances from the dividing line between the two republics they become scarcer and command a higher wage, or about 50 cents per day.—Experiments

in the cultivation of the CASTOR-OIL BEAN are being conducted near Monte Cristi. These beans grow wild in many sections of the country and it is believed that by scientific and systematic culture good results could be obtained; it is an industry wholly undeveloped and one that is promising. Much idle land could be secured at reasonable prices, say from 50 cents to \$10 per acre; the best land is uncleared, as the cleared land of fertility is soon covered with a second growth, and therefore remains in that state unless actively cultivated.



ECUADOR

Preliminary steps have been taken for holding in the near future the first MEDICAL CONGRESS of Ecuador, the time and place to be announced at a later date. The governors of eight of the Provinces of the Republic, the mayors of five of the principal cities, the Central University, the Municipal Board of Charity of Guayaquil, the Red Cross Society, the sanitary bureau, the chemical laboratory of the municipality of Guayaquil, and the medical societies of the country are cooperating in making the proposed congress a useful and successful gathering of the physicians of Ecuador for the discussion of problems relating to the public health, the combating of contagious and infectious diseases and the proper handling of medical problems of general interest in the Republic.---The association of agriculturists of Guayaquil which was formed some time ago under the impression that similar organizations would be organized in Brazil and other cacao-producing countries, with the object of taking such cooperative action as might be necessary to fix the price of cacao at a just and reasonable figure in the markets of the world, has not attained the purpose desired. According to press reports the arrangement has not been satisfactory to Ecuadorean producers of cacao, due largely to the lack of cooperation with the other cacao-producing centers of the world. It would seem that the organization now proposes to confine its activities exclusively to the cacao industry of the Republic, taking such measures as may be deemed expedient for decreasing the cost of production and bettering the quality of the product. A recent decree of the President of the Republic provides that 50 per cent of the 1½ centavos export tax per kilo on cacao shall be paid into the federal treasury as a loan to be used in meeting the urgent expenses of the Government. The amount thus paid into the federal treasury is to be returned to the proper fund at a later date. Export taxes on cacao are due the municipality of Guayquil to the

amount of 546,000 sucre (\$265,902).—The Consul General of Ecuador in Hamburg has contracted, on behalf of the Ecuadorean Government, with a German civil engineer, to go to Ecuador to assist the Government in railway construction and exploitation. The engineer referred to is an expert in these matters and was recommended by the head of the Prussian Railways for service in Ecuador.

—A Chilean company with headquarters at Valparaiso desires to obtain a concession from the Government of Ecuador for the lease of two of the Galapagos Islands for development and colonization purposes.—The Government of Ecuador has paid 6,000 sucre (\$2,922) to Julian Fabre, a French engineer, for studies of a RAILWAY from Puerto Bolivar to Zamora, the preliminary survey and plans of which were approved by the Department of Public Works.

—The railway board has reported favorably on the QUITO TO ESMERALDAS railway, plans and estimates of which were submitted by a German construction company. The Government has provided funds necessary for carrying on the preliminary work necessary to be done in the construction of the Huigra to Cuenca Railway, which is to be built by a firm of Berlin contractors.—The superior board of public instruction has voted 80,000 sucre (\$38,960) for the establishment of a POLYTECHNIC SCHOOL annexed to the Central University.—A contract has been made with Carlos Perez Quiñonez and Miguel Paez, managers of the Pichincha Bank in Quito, for the installation of an ELECTRIC light and power plant at Cuenca.—A French instructor has been contracted by the Government of Ecuador to teach in the NORMAL SCHOOL at Ambato.—The Department of Public Instruction of the Government of Ecuador has recently issued four SCHOLARSHIPS in the school of preceptors of Santiago, Chile, to Ecuadorean youths. The Chilean Government has offered two more agricultural scholarships, or a total of eight in all.



GUATEMALA

Manuel Estrada Cabrera, President of the Republic of Guatemala delivered an interesting MESSAGE to the National Congress on the opening of the regular session of that body on March 1, 1914, in which he stated that the value of the agricultural productions of the country during the previous year amounted to 540,189,111 pesos as compared with 533,011,756 pesos in 1912, the value of the agricultural products of the Republic having nearly doubled within the last ten years. Deducting the agricultural products exported

during the year, there were available for home consumption in 1913 the following: 2,810,650 quintals of corn; 180,095 quintals of beans; 260,000 quintals of coffee; 173,730 quintals of sugar; 612,315 quintals of raw sugar; 34,528 quintals of rice; 218,476 quintals of wheat; 6,306 quintals of barley; 4,312 quintals of oats; 822 quintals of peas; 3,827 quintals of cacao; 55,040 quintals of potatoes; 2,551 quintals of tobacco; 680 quintals of cotton, and 461,068 bunches of bananas. The mining industry of the Republic is in a prosperous condition. The rich deposits of argentiferous lead ores in the Department of Huehuetenango continue to be profitably exploited, notwithstanding the primitive methods in use in working the mines. The output of Las Quebradas gold placer mines in the Department of Izabal has increased, and other mines equally rich are being exploited in the same zone. Placer mining is also being actively engaged in on the banks of the Grande and Platanos Rivers, jurisdiction of Baja Verapaz, and in Progreso gold placer mining promises large profits. Active mining operations are being conducted in the Departments of Guatemala, Santa Rosa, and Chiquimula, and at Alotepeque in the rich Concepcion mining zone. During the year 40 mining concessions were granted, and 60 denunciations made, 39 of which are still pending. In 1913 trade and industrial marks were issued to the number of 72, and 14 patents of invention were issued. In the same year 27 towns were supplied with potable water. During the past year the Chiquimulilla Canal, and 87 kilometers of public highways were opened to traffic. The railways in operation in 1913 aggregated 498 miles of track. The post offices of the Republic during the same year numbered 380, and the number of pieces of mail matter handled totaled 3,637,740. The number of telegrams transmitted in 1913 was 1,329,789, as compared with 1,245,621 in 1912. There are 233 telegraph and 100 telephone offices in operation in the Republic. The telegraph system covers 6,171 kilometers and the telephone system 792 kilometers. During 1913 there were 17,679 patients treated in the hospitals of the Republic, of which number 1,656 died. The charitable institutions of the city of Guatemala in 1913 cared for 290 indigent boys, 173 girls, 50 aged persons, and 43 infants. The births in the Republic in 1913 numbered 75,593, the deaths 38,320, and the marriages 5,274. October 12 of each year, in honor of the discovery of America by Columbus, was made a public holiday. In 1913 there were 61,136 pupils enrolled in the public schools of the country, or 1,532 more than in 1912.—The Government of Guatemala has bought AMBULANCES to the value of \$2,500 for use of the army in the city of Guatemala.—The consulate of the Republic of Guatemala having jurisdiction over Liverpool and Manchester, England, has been made a CONSULATE GENERAL with jurisdiction over Ireland, Scotland, and North England.—The Pan Ameri-

can Railway has connected its line at Vado Ancho with the Ocos Railway, thus completing railway communication between Guatemala and Mexico. With the exception of a gap of 3 miles, and the construction of a permanent bridge over the Naranjo River, the Pan American Railway of Guatemala is completed to Ayutla on the Mexican frontier.—The development of ROADS and means of communication throughout the entire Republic continues at a rapid rate. Repairs to the Chiquimulilla Canal, a waterway of great importance to the agricultural and commercial interests of the southern section of the Department of Santa Rosa, have been completed.

A decorative horizontal banner with intricate scrollwork and floral motifs. The word "HAITI" is centered in a bold, serif font within the banner's frame.

The President of the Republic has appointed Mr. Georges Séjourné inspector general of the CONSULATE of Haiti in the West Indies, with residence at Kingston, Jamaica.—On March 30 of the present year BANK NOTES of the denomination of 5 gourdes each, representing a total value of 186,410 gourdes, retired from circulation by order of the Conversion Board, were destroyed at Port au Prince. The total retirement of bank notes of this denomination to date amounts to 1,020,200 gourdes out of an issue of 2,000,000 gourdes, leaving in circulation at the present time 979,800 gourdes.—The Chief Executive has appointed Mr. La Cruz, a telegrapher of many years' experience and formerly in charge of the Gonaïves telegraph office, director of the land TELEGRAPH system of the Republic.—On the 29th of last March the municipal board of Port au Prince presented a beautiful silver cup to the United Haitian SPORTING societies, in commemoration of the tenth anniversary of the official introduction of sports in the Republic. The cup contains an inscription in French, a translation of which is as follows: "To the founders of sports. City of Port au Prince. 1904-1914."—General Blanchard has been appointed director of POLICE of the Republic of Haiti.—According to Le Matin of Port au Prince, the aviators, Frank Burnside and Fausto Rodriguez, who have been giving aerial performances in the Dominican Republic, propose to give AVIATION exhibitions in Haiti before returning to the United States. These two aviators, who represent the Thomas Brothers Aeroplane Co., have the reputation of being very clever and accomplished manipulators of aerial crafts. The paper referred to recommends that an aviation board be organized in the capital of the Republic for the purpose of formulating a plan for celebrating an aviation week, and the Government has been requested to cooperate in the matter.—At

the beginning of March last the new 8,600 ton STEAMER *Haiti* of the Compagnie Generale Transatlantique, inaugurated a steamship service in which this vessel was to ply between Haiti and France. The steamer is an up-to-date ship, has all modern conveniences, and a capacity for 112 first-class and 32 second-class passengers. Its dimensions are as follows: Length, 130 meters; width, 16; and height, 10 meters.—There have appeared recently in Port au Prince two new NEWSPAPERS, namely, "El Glaive" and "La Semaine Politique," under the direction, respectively, of Mr. Philippe Sterlin and Mr. C. Bruno. Both publications treat of matters of general interest in the Republic.



HONDURAS

The Athenaeum of Honduras, with headquarters at Tegucigalpa, has decided to publish in a special pamphlet the conditions or bases relating to the first national PEDAGOGIC CONTEST to be held in the Republic and send a copy to each of the school-teachers of Honduras. A prize of 200 pesos (\$86.80) will be given to the teacher who formulates the most desirable plan for the organization of the rural schools of the Republic, and the Luis Andres Zúñiga prize of 100 pesos (\$43.40) will be awarded to the author of the best work on object lessons. It is not required that competitors for the latter prize shall have studied in the normal schools of Honduras. Contestants for prizes may send their productions to the secretary of the Atthenæum in Tegucigalpa up to and including November 30 of the present year. The jury of awards is to be composed of the following teachers: Miss Visitacion Padilla and Messrs. Pedro Nufio, Esteban Guardiola, Luis Landa, and Rafael Heliodoro Valle. The awards will be made on January 31, 1915. The works of the successful contestants are to be published by the Athenæum, half of the edition to belong to the author and the other half to be subject to the orders of the department of public instruction.—The city of LA CEIBA, which, on March 7 last, lost in a destructive fire 14 blocks in the business section of the city, valued at several million dollars, is rapidly being rebuilt. The fire consumed 2 theaters, 1 bank, 3 hotels, 26 commercial houses, and a large number of other buildings.—The Trujillo RAILWAY has been definitely surveyed from La Puntilla, in the direction of the Aguan River via Tarros, for a distance of 61 kilometers. Of this survey 11 kilometers have been graded and are ready for the laying of the rails, and the right of way has been cleared for a distance of 24 kilometers. Enough ties and rails have been received to complete 15 kilometers of the road. A

provisional wharf 650 feet long has been constructed, and warehouses and dwellings for employees have been built. The estimated cost of the railway to date is 500,000 pesos (\$217,000). From the Aguan River the survey will extend via Iriona to San Esteban and San Carlos.—Otto Reinbeck, chargé d'affaires of the Government of Honduras, near the Government of Mexico, has been commissioned by President Bertrand to effect the exchange of ratifications of the PARCEL POST CONVENTION, signed on March 24, 1908, in the city of Mexico, by the representatives of the Governments of Mexico and Honduras.—The expense budget of the INTERNATIONAL CENTRAL AMERICAN BUREAU for the year beginning September 15, 1913, has been approved by the President of Honduras. The amount of the budget is \$15,000 American gold, divided among the five Central American States. The quota of the Government of Honduras is \$3,000, payable semiannually in advance.—George J. Haylock has been authorized by the Congress of Honduras to establish an ICE FACTORY at Guanaja, department of the Bahia Islands, and has been given the right to import free of duty the necessary machinery for equipping the factory.—Gaido and Doninelli have been granted the exclusive privilege of manufacturing cement blocks, pipes, and similar articles in the city of San Pedro Sula for a period of five years.—The President of Honduras has promulgated the general ARBITRATION TREATY made with Italy on December 8, 1913.—Rules and regulations have been issued specifying that the imports and sale of SALTPETER shall be for account of the State. The selling price has been fixed at 75 centavos (33 cents) per pound for the present. Orders must be made through the Treasury Department.—The municipality of Santa Rosa has taken steps to secure a supply of potable WATER.—The "Fabrica Union" (Union Factory), a corporation with headquarters in the city of San Pedro Sula, has been recognized as a juridic entity. The capital of this corporation is 250,000 pesos (\$108,000).



The department of fomento, colonization, and industry has granted a concession to Carlos Aguila for the exploitation of PEARL SHELLS in the territorial waters of the Republic, including the islands of the zone comprised between Puerto Angel, of the State of Oaxaca, and San Blas, of the State of Chiapas. The contract is for a period of 10 years, but does not confer exclusive rights on the concessionaire. The exploitation work must be commenced not later than the first half of October, 1915. The concessionaire agrees to pay into the

federal treasury 66.80 pesos (\$33.40) per 1,000 pearl shells, 20 pesos (\$10) per 1,000 abulon pearl shells, and 10 pesos (\$5) per 1,000 mother-of-pearl shells extracted. During each season the concessionaire agrees to take out at least 12,000 shells of each kind, all of which must be of full growth. The exploitation of any but full-grown shells is prohibited. The concessionaire agrees to plant artificial beds of the mollusks producing the different shells, and to form each year not less than 10 hectares of breeding ground.—The department of communication and public works has authorized the Vera Cruz Local Traction Co. (Ltd.) to construct and exploit for a period of 99 years a RAILWAY from El Higo, State of Vera Cruz, to Tampico, State of Tamaulipas, or to a point on the line of the National Railways from Vera Cruz to the port of Tampico. The company agrees to build at least 40 kilometers of line by July 1, 1915, and the remainder of the line on or before September 19, 1916. The weight of the rails, the grades and curves are to be fixed by the department of public works. The railway passenger tariff, per kilometer, is as follows: First-class, 3 centavos, and second-class, 1½ centavos. First-class passengers are entitled to 50 kilos of baggage free, and second-class to 15. The freight tariff is divided into 12 classes, the prices ranging from 3 to 6 centavos per 1,000 kilos per kilometer.—The first EXPOSITION of school labors and fine arts was held under the auspices of the department of public instruction and fine arts in the City of Mexico from April 13 to May 12, 1914. Mexican artists and foreign artists residing in the Republic, and the professors of the schools of the country, together with their graduates and pupils, were invited to participate in the exposition. The exhibits consisted of drawings, paintings of all kinds, architectural plans, sculpture, engraving, industrial decorative art, and artistic work produced by women. First, second, and third class prizes in the form of bronze medals will be awarded to exhibitors. Articles placed on exhibit may be sold, either directly by their owners or through the officials of the exposition, but delivery will not be made before the exposition is concluded.—The department of fomento, colonization, and industry has authorized Adolfo Aymes to exploit TIMBER and chicle in the national territory of Quintana Roo over an extent of 91,700 hectares of land for a period of 10 years. The concessionaire agrees to pay to the Government 7 pesos (\$3.50) for each mahogany or cedar tree cut, 1.50 pesos (\$0.75) for each tree of construction timber, 50 centavos (\$0.25) for each ton of firewood gathered, 30 pesos (\$15) for each ton of chicle, 1 peso (\$0.50) for each hectare of land used for cultivation, and 50 centavos (\$0.25) per annum for each head of cattle pastured on the lands included in the present contract. The concessionaire is required to deposit 5,000 pesos (\$2,500) as a guarantee for the faithful fulfillment of the contract.—The department of fomento,

colonization, and industry has extended the FISHERY concession made on May 13, 1911, with "La Pescadora" Co. for a period of five years. This company is entitled to fish in the Gulf of California between the mouth of the Colorado River and the port of Guaymas, and has planned to establish a factory for canning and preserving fish somewhere on the coast.——A 10-year concession has been granted to Guerra & Carrera for the exploitation of GUANO on the Isabelas, San Juanito, Marietas, Los Angeles, Afuera, Perlas, and Medio Islands. The concessionaires must pay to the Government 75 centavos (\$0.375) per ton of guano extracted.



The STAMP LAW of Nicaragua requires the stamping of documents as follows: Bills of lading or shipping manifests, 10 cents; consular and diplomatic certificates, 10 cents; manifests of the cargo of vessels anchoring in ports of the Republic, 25 cents; manifests and copies of clearances given to consignors for the clearing of vessels, 25 cents; manifests of cargo going out of the Republic, 25 cents; pay rolls and receipts for salaries which are paid in any fiscal office of the Republic by its representative, from \$50 upward, \$2 per \$1,000; promissory notes, \$1 per \$1,000; licenses of vessels registered under the Nicaraguan flag, 10 cents per ton; petitions for loading or unloading foreign vessels leaving for foreign ports, 25 cents; petitions for the importation or exportation of merchandise, 10 cents; petitions for registry of reshipping or transshipping of merchandise, 10 cents; petitions for permits, 5 cents, and petitions for the storage of merchandise, 10 cents.——The committee in charge of the work for the opening of the NEW PORT of Guapinolapa on Lake Nicaragua has changed the name of the port to Port Diaz.——According to the American of Bluefields, the two new LIGHTHOUSES at Corinto and San Juan del Sur are completed. The one at Corinto is 87 feet above sea level, and has a white light of 100,000 candlepower, which flashes every three seconds, burning for three-tenths of a second and remaining extinguished two and seven-tenths. This light is visible for a distance of 14 miles at sea. The light at San Juan del Sur is similar to that at Corinto. It is 100 feet above sea level and is visible 11 miles out at sea. These are the only lighthouses of this class on the Pacific coast from Mexico to Panama, and are of the kind adopted by the United States Government for the Panama Canal.——Foreign letter POSTAGE has been increased in Nicaragua from 4 to 5 cents.——The Pacific Railroad Co. has established at Managua a PRINTING

SHOP for company work, using temporarily one of the workshops near the roundhouse for headquarters.—A new CATHEDRAL is to be built at Managua on the present site of the Hotel America and part of Children's Park. Stone will be used from the old church of Santiago.—According to the report of an experienced mining engineer who recently visited and made extensive examinations in the Pis-Pis mining district there has recently been a number of transfers of important MINES in that zone, among which may be mentioned the Bonanza group, the Mars, the Siempreviva, and the Lone Star. It is believed that other important mines in the vicinity will soon be sold to the same interests which bought the aforementioned mines. The Tonopah mining interests of Nevada are said to be negotiating for the purchase of a controlling share in the large group of mines known as the Panama and the Topaz properties. Experts have examined these mines, and it is predicted that arrangements for their exploitation and development on a large scale will be arrived at. Indications point to extensive mining operations and development work in the Pis-Pis district in the near future.—A law has recently been promulgated which provides that the manufacture of AGUARDIENTE from sugar cane is declared free on condition that the production and storage thereof be in the distilling centers or in the authorized local depositories or on payment of the fiscal taxes that may be imposed, all in accordance with the laws at present in force. When there is not a sufficient supply in the depositories for consumption, the Government may import aguardiente from abroad.—It is reported that a number of New Orleans capitalists will develop several thousand square miles of PINE FORESTS on the Nicaraguan coast of the Caribbean Sea. Sawmills are to be erected, turpentine gathered, sugar cane planted, and cattle ranches established. The syndicate referred to also proposes to cut mahogany and cedar logs. The manager of the undertaking is Col. C. H. Ellis. The capital of the company is \$1,200,000.



Plans for a new HOSPITAL to take the place of the Santo Tomas Hospital in the Federal Capital have been prepared under the direction of Dr. W. B. Caldwell, Dr. Velasquez, and other prominent physicians of the city of Panama. These plans have been submitted to the department of fomento (promotion) and to the President of the Republic, and have been approved. The new hospital is to be built in the suburbs of the city of Panama on the shores of the Pacific Ocean, between the exposition grounds and the Bella Vista

baths. The plans show a number of separate wooden buildings, well lighted and ventilated. The operating rooms, laboratories, and kitchens are to be constructed of cement. The capacity is 600 patients, but the grounds are large enough for the construction of additional buildings if needed. The hospital is to have a special department for lying-in patients and an isolated building for the use of persons suffering with contagious diseases. Two buildings of 20 rooms each are to be erected for patients desiring special treatment. Congress is to be requested to appropriate funds for the construction of the hospital, and if the appropriation is made it is proposed to commence work the latter part of 1914 or early in 1915.—The Treasury Department of the Government of Panama has ordered from the American Bank Note Co., of New York City, the following POSTAGE STAMPS for use during the National Exposition: One million olive-green stamps of the denomination of $\frac{1}{2}$ centesimo of a balboa representing the Chorerra Falls; 1,000,000 1-centesimo green stamps representing the Panama Canal in relief; 1,000,000 2-centesimo red stamps representing Vasco Núñez de Balboa taking possession of the Pacific Ocean; 1,000,000 2½-centesimo light-red stamps representing the ruins of the tower and of the Cathedral of San Anastasio in the old city of Panama; 1,000,000 3-centesimo violet colored stamps representing the Palace of Arts of the Exposition of Panama; 1,000,000 5-centesimo dark-blue stamps representing the locks and Gatun Lake; 1,000,000 10-centesimo vermillion colored stamps representing Culebra Cut of the Panama Canal; and 500,000 20-centesimo light chocolate colored stamps representing the arch of the ruins of the Monastery of Santo Domingo.—A law has been passed authorizing the CODIFYING COMMISSION to publish its works in the form of a magazine or review entitled "Anales de la Comision Codificadora" (Annals of the Codifying Commission). The publication will be issued at such times as the work of the commission may require, and each edition will consist of 1,000 copies.—The Republics of Panama and Costa Rica have celebrated a PARCEL-POST CONVENTION, the full Spanish text of which is published in the "Gaceta Oficial" of Panama of March 27 last.—The concession granted to A. F. Wong by the Government of Panama on March 31, 1914, authorizing him to collect the duties on OPIUM imported into the Republic of Panama for a year from May 17, 1914, and for which privilege Wong agreed to pay \$20,000, has been transferred to Wong Lam.—The ceremony of the inauguration of the works of the Chiricano RAILWAY took place on April 4 last, President Porras driving the first spike in the presence of the diplomatic corps and a large number of people. This railway will connect the port of Pedregal with Boquete and with the Bugaba region, which is one of the most fertile zones of the Republic.—The department of

public instruction of the Government of Panama has recently awarded 26 SCHOLARSHIPS in the National Normal Institute for Males, 21 in the Normal School for Girls, and 10 in the School of Arts and Crafts.—The French-American committee in Paris proposes to erect a MONUMENT in Panama with funds subscribed by the French people in commemoration of the participation of France in uniting the Atlantic and Pacific Oceans.



PARAGUAY

Through the courtesy of Señor Don Hector Velasquez, minister of Paraguay in Washington, the MONTHLY BULLETIN has been furnished with the following interesting data: Lieut. Silvio Pettirossi, a Paraguayan AVIATOR, has been very successful in aviation tests held in Paris. El Diario, a daily newspaper of Asuncion, has headed a national subscription for funds with which to purchase an aeroplane to be presented to Señor Pettirossi.—Frank Carpenter, an AMERICAN TRAVELER, newspaper correspondent, and geographer, who visited Paraguay 18 years ago, was recently in the Republic representing a United States newspaper syndicate. The result of his first visit was the publication of a book. Mr. Carpenter has been furnished with every opportunity to study the people and resources of the Republic.—A number of German military officers have recently arrived in Asuncion for the purpose of definitely organizing the Paraguayan army and to establish MILITARY SCHOOLS.—There has been a gradual increase in the general business of the Federal capital for a considerable period of time. One of the most notable results of improved business conditions is the steady growth of the suburbs of Asuncion.—The international RAILWAY which connects Asuncion with Buenos Aires has greatly improved its transportation facilities. This has greatly increased the traffic between the two cities.—A large number of Paraguayans participated in the CARNIVAL festivities in Montevideo, making the journey thither in three days.—The provisional branch of the Borja to Iguazu RAILWAY, at which point it will connect with the Brazilian lines, has constructed 60 kilometers of track.—The National Congress has passed a law, effective in May, 1914, imposing a consumption, industrial, and manufacture tax on domestic and foreign LIQUORS.—A private COLONY called "Colonia Barthe" has been established on the Upper Parana River on 20 leagues of land. The land is divided into lots of 30 hectares each. The first lots are given free to colonists, the remaining land to be sold on six months' time at 6 pesos gold (\$5.70) per hectare.—The following CONSULS

have recently been appointed: José María Candiotti, consul at Santa Fe, Argentine Republic; Federico Berg, consul at Solingen, Germany; G. Huret Pfannel, consul at Garmisch, Bavaria; and Guido Bouchier Boucher, vice consul at Sydney, Australia.—The total cost of the ENCARNACION CHURCH, one of the most beautiful edifices in the city of Asuncion, was up to January 31 last, 1,216,608 pesos (\$121,660). At that time funds were available to the amount of 109,977 pesos (\$10,997) for the continuation of the work.—According to the Paraguayan Chronicle there will be an abundant crop of an exceptionally fine quality of TOBACCO raised in the Republic during the present year. Agricultural reports also show that the sugar-cane, corn, and mandioca crops will be abundant and of good quality in 1914. It was thought some time ago that a slight drought, which occurred early in the season, had injured these crops, but copious rains which fell later over an extensive area enabled them to recover from the effects of the dry weather, and, in the case of tobacco, caused the formation and growth of fine compact leaves without blemish. The area under tobacco cultivation in 1913 is greater than that cultivated during the previous year. Slack lumber operations, which have existed in some parts of the Republic for some time past, caused many laborers engaged in that industry to return to the farm, and the result has been larger areas under cultivation and an increase in the production of staple agricultural products. Generally speaking, the agricultural outlook in Paraguay is exceedingly favorable, and the prospects are that the yield of agricultural crops will be greatly in excess of that of the previous year.—A WIRELESS telegraph station is being erected in Asuncion opposite the new office of the war department.—Construction work on the building of the PARAGUAYAN INSTITUTE in the city of Asuncion is soon to be commenced and carried to completion with as little delay as possible. According to press reports, the Government of Paraguay has taken active steps looking to the REPATRIATION of a large number of Paraguayan citizens, estimated at 30,000, who some time ago removed to the neighboring republics because of political disturbances in Paraguay.



A bill has been passed by Congress authorizing the establishment of a SCHOOL OF PRACTICAL INSTRUCTION in the suburbs of Puno for the training of boys of from 6 to 14 years of age. A large tract of land is to be purchased in the vicinity for the use of the school. The curriculum adopted comprises the following branches: Reading,

writing, arithmetic, physical and military exercises, practical agriculture, improvement of natural grasses, practical studies in stock raising and the crossing of breeds, pottery, shoemaking, and weaving. The school will be equipped for instructing 200 pupils from the eight Provinces of the department, the number from each Province to be allotted in proportion to the school population of the Province in comparison with the total school population of the department. In selecting pupils for the school, preference is to be given to orphans who have lost both parents and to orphans who are without fathers but who have mothers. The school is to be established especially for the benefit of native children of poor parents. Funds for the establishment and maintenance of the school are to be provided by Congress in the annual budgets, Congress to decide as to the amount of the funds necessary for that purpose. If the school proves a success, it is planned to establish other schools of the same kind in the different departments of the Republic.—The Congress of Peru has authorized the departmental board of Arequipa to construct a SUSPENSION BRIDGE over the Mages River, Province of Castilla, at the point shown in the survey of the Vitor to Mages railway, between Cantos and Coriri. The sum of £1,000 (\$4,860) is to be used for this purpose. When the bridge is completed it will be turned over to the Government of the Province of Castilla, and a small toll will be charged for its use.—The Congress of Peru has appropriated £650 (\$3,159) toward the increase of the WATER SUPPLY of the city of Ayacucho. The municipality of Ayacucho proposes to purchase the Quicapata hacienda and to bring water therefrom, through an aqueduct or a canal, to the city of Ayacucho.—August 14, 1914, the centenary of the PUMACAHUA REBELLION, has been declared a holiday in the first and secondary schools of the Republic. On that day a salute to the national flag will be offered in the schools referred to, after which the professors of history will explain to the pupils the historical meaning of the celebration. A prize for the best essay on this rebellion has been offered to fourth-year students of the Federal colleges, and a prize of £30 (\$146) will be given to the Peruvian author or writer who gives the best detailed description of the Pumacahua rebellion, its influence, results, etc. On the day mentioned the advanced intermediate students of the College of National Sciences at Cuzco, in uniform and bearing arms, will proceed to Sieuani where, a hundred years ago, the patriot Mateo Garcia Pumacahua, was executed in the principal plaza of that place.—An arbitration convention has been entered into between the governments of Peru and France for the settlement of the FRENCH CLAIMS against Peru by the arbitration court at The Hague. The amount involved in these claims is 25,000,000 francs (\$4,825,000).

SALVADOR

The President of the Republic has approved the curriculum of the SCHOOL OF COMMERCE AND FINANCE in the city of San Salvador for the school year 1914, as follows: Preparatory course: Spanish grammar; Greek and Latin roots; composition; geography; arithmetic; penmanship, drawing, and English. First year professional course: Mercantile accounting and arithmetic; codes of commerce, laws, of finance, and stenography. Second year course: Bookkeeping, English, French, commercial geography, political economy and stenography. Third year course: Banking accounts: commercial correspondence and typewriting; industrial chemistry; French; political economy and stenography.—A company has been organized at La Union to furnish ELECTRIC light and power to that city and the surrounding country. Paulino Carias and Alberto Pohl are the principal stockholders of the company.—The municipal council of Chinameca proposes to erect a municipal MARKET in that town. Chinameca is situated in a thickly populated and highly developed agricultural district, in which intensive farming is carried on to a considerable extent, and particular attention is given to the raising of fine stock.—The Occidental Bank has received from abroad 150 boxes of silver coins containing 2,000 colones each, or a total of 300,000 colones (\$130,200). The shipment was made through the port of La Union. Of the amount received, 70,000 colones (\$30,380) remained in La Union; 24,000 colones (\$10,416) were consigned to Sonsonante; 50,000 colones (\$21,700) went to Santa Ana, and the remainder was shipped to the city of San Salvador. A shipment of silver coins of the denominations of 50, 25, and 10 centavos has also been received by the Occidental Bank for the purpose of supplying the demand for small change, of which frequently there is a scarcity in different parts of the Republic.—According to a report of the department of TELEGRAPHS and telephones of the Government of Salvador, the assets of this branch of the public service on December 31, 1913, were 2,426,344 colones (\$1,053,033).—The National BUREAU OF ENGRAVING of the Republic of San Salvador in the city of San Salvador did work in 1913 aggregating a value of 387,510 colones (\$168,179).—The Government recently received five bids from prominent contractors for the construction of a BRIDGE over the Lempa River at La Barca. After an examination of the estimates by Government experts all of them were rejected and a call for new bids recommended.—An organization called the SOCIETY OF NEWSPAPERS has

been established in Salvador with headquarters in the Federal Capital. Members of the organization must be connected in some capacity with the newspaper trade. The society has been recognized by the President of the Republic as a juridic entity.—Sr. José Alfaro Moran, Consul of the Republic of Salvador in New York, reports that the EXPORTS from the port of New York to the Republic of El Salvador during the first quarter of 1914 consisted of 28,512 packages of merchandise, weighing 1,707,839 kilos, valued at \$1,551,828.42 American gold. The totals for each port were as follows: Acajutla, 17,613 packages weighing 944,556 kilos, valued at \$1,288,995.43; La Union, 5,317 packages, weighing 406,272 kilos, valued at \$195,236.33; La Libertad, 3,324 packages, weighing 204,511 kilos, valued at \$56,557.07; and El Triunfo, 2,257 packages weighing 152,500 kilos, valued at \$11,039.59. The principal shipments, according to value, during the three months referred to, were as follows: Silver coin, \$1,167,026.42; cotton cloth and manufactures thereof, \$131,743.92; machinery, \$52,687.92; hardware, \$47,511.21; prepared hides, \$40,792.02, and drugs and medicines, \$22,083.60. The silver was coined in the Philadelphia Mint in denominations of 1 colon, 25, 10, and 5 centesimos. The total value of Salvadorian money shipped during the first quarter of 1914 was \$2,530,000 silver pesos.



URUGUAY

The President of the Republic, in a special message to Congress, has requested permission of that body to definitely organize a MILITARY AVIATION SCHOOL. It is proposed to equip the school with flying machines from France. It is the intention of the Government to purchase the ground now being used at Los Cerrillos in the suburbs of Montevideo, and to use same for the aviation school.—President José Batlle y Ordoñez recommends the passage of a GENERAL ROAD LAW under which the construction and improvement of the public highways of the country may be systematically carried on without having to resort to special laws in each case. The law which the President requests Congress to enact concerning roads embodies the recommendations of the public roads congress, which was held in Montevideo from the 6th to the 14th of October, 1913, and in which the agricultural and stock-raising interests of the Republic actively participated. One of the principal things recommended is the establishment of a permanent road fund of from \$1,500,000 to

\$2,000,000, this amount to be provided for by annual appropriations in the budget. If this is done the President shows that an extensive plan for the construction and upkeep of roads could then be carried out covering, say, a period of 10 years, and excellent results obtained therefrom. Under the road law of 1905 the sum of \$3,500,000 was set aside for road improvements, and later additions were made to this sum making the amount available over \$4,678,000. Since 1906 the road bureau has built in Uruguay 82 kilometers of macadamized highways, and there are now in course of construction 52 kilometers and 87 more are planned to be built. During the same period the bureau of highways has constructed 39 bridges, some of which are of great importance, 9 bridges are now in course of construction, 11 have been definitely planned, and 3 projected. All this has been done under the 1905 law with funds amounting to about \$4,678,000. It can be easily seen, therefore, what an extensive amount of road construction and improvements could be effected in 10 years with an annual outlay of from \$1,500,000 to \$2,000,000.— In a special message to Congress the President reviews the part Uruguay took in the international congress for the STANDARDIZATION OF TIME, which met in Paris on October 15, 1912, the recommendations of this congress having been signed in 1913 by delegates of Uruguay appointed for the purpose in the form of an ad referendum convention. The President has submitted this convention to the Congress and recommends the approval of the same, together with an annual appropriation of 400 francs as Uruguay's quota for the support of the international time association.— An executive decree has been issued providing for the appointment of 150 additional TEACHERS for service in the public schools of the country, 100 of which are for schools of the first grade and 50 for those of the second grade.— The President has recommended to Congress the appropriation of \$4,666 (\$4,806) toward the erection of a MONUMENT in Panama in honor of Vasco Núñez de Balboa, the discoverer of the Pacific Ocean. This monument is to be unveiled during the Panama Exposition in 1915.— At the CORN FAIR, which was held at San Jose in May of the present year, more than 600 Uruguayan agriculturists took part.— The department of industry has taken steps to establish two new Russian COLONIES in the department of Paysandu and Artigas. Negotiations are in progress looking to the settlement of more than 500 families in these colonies.— On March 1, 1914, a committee representing the merchants and manufacturers of Montevideo presented to President José Batlle y Ordoñez an engraved parchment and plaque, as expressions of their goodwill and support, and in honor of the third anniversary of the second term of his administration.— A PROPAGANDA MAP has been prepared by the department of foreign relations for circulation abroad. This map

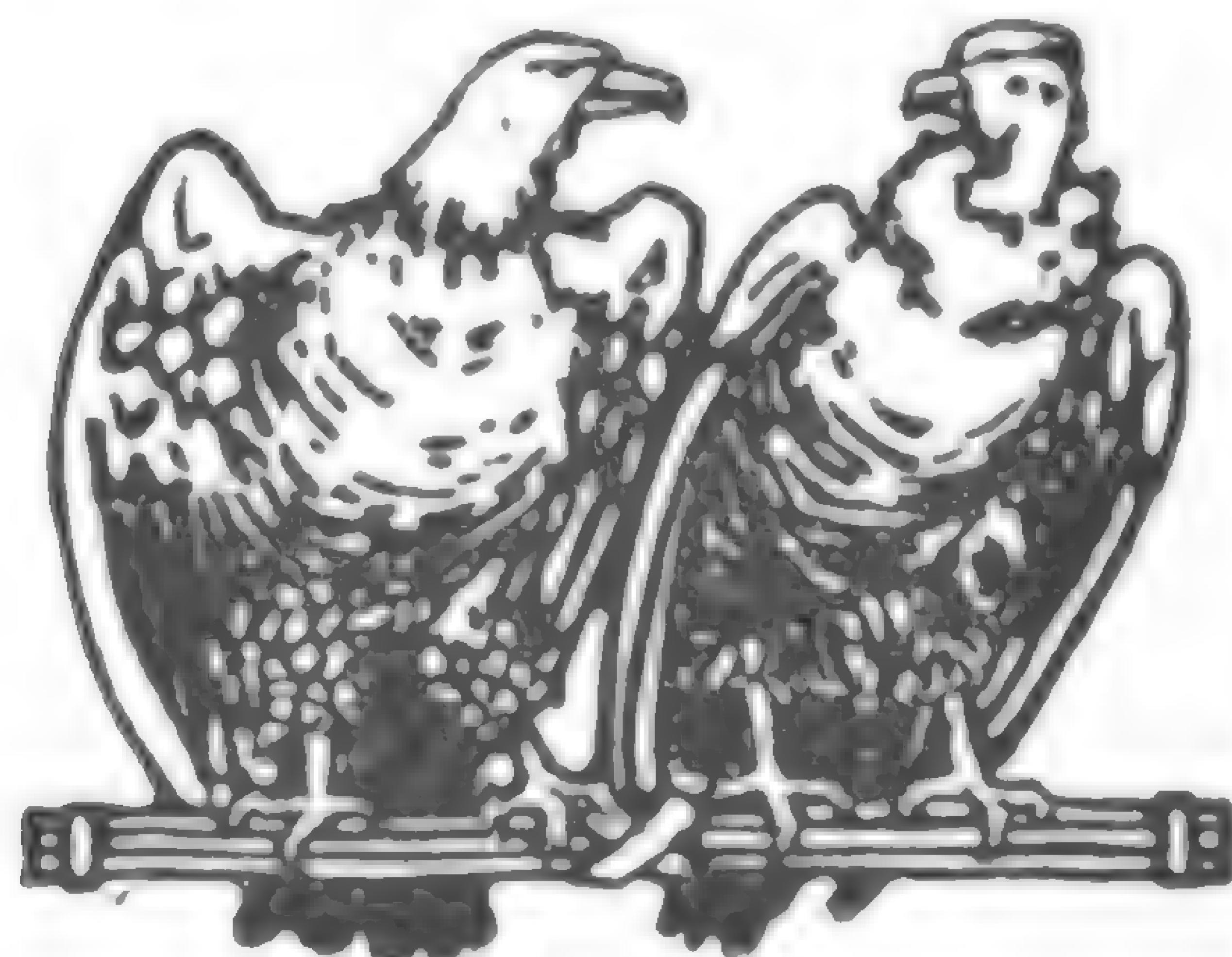
shows the principal data concerning the Republic and indicates the progress of the country.—The consulate of Peru at Montevideo has requested the department of foreign relations to permit the circulation of the PERUVIAN POUND in Uruguay at a fixed rate of 4.70 pesos (\$4.86).



VENEZUELA

The TRAFFIC on the Puerto Cabello Railway was considerably larger during 1913 than for the previous year, and present prospects indicate a still greater increase for 1914. The receipts were larger and operating expenses less than for previous years, which facts make the company's balance sheet a very satisfactory one.—The ELECTRIFICATION of the Macuto & Coast Line Railway has been practically completed, and the improved service will greatly aid all kinds of traffic between the port of La Guaira and Macuto, a distance of about 3 miles. Macuto is visited by many tourists each year and the better facilities will doubtless cause a much larger passenger traffic than formerly.—British interest announce that their OIL CONCESSIONS in Venezuela will probably exceed expectations, and officials of one of the corporations will visit Panama and other countries with a view of making arrangements for the distribution of oil on a large scale.—Three companies are now engaged in the development of OIL LANDS in the vicinity of Lake Maracaibo, the most active one being the Caribbean Petroleum Co., of Philadelphia. More than 30 geologists, engineers, and drill runners from the United States are directing the work, while 200 native laborers are employed in sinking wells and in preparatory work. If oil is found in quantities as indicated by the seepage and the geological construction of the earth in that section, the Philadelphia company will proceed to develop the enterprise on a large scale. The two other concerns are British-owned and both are doing considerable reconnaissance work.—There are three MOVING PICTURE ENTERPRISES operating in Caracas and the films shown are of the best grade. At La Guaira there is only one performance or show a week, for the reason that no building is available other than on Sunday, when the pictures are shown.—The report of the company operating the La Guaira & Caracas RAILWAY shows that a dividend of 7 per cent for the year of 1913 was returned to the stockholders, with an additional bonus of 1 per cent. The report for the first two months of the present year indicates an increase in

earnings of more than \$5,000 over that for the same period of 1913. On the whole, business conditions are good, with an excellent outlook for the remainder of the year.—The national GLASS FACTORY at Caracas has recently installed a new furnace with a capacity of 20 tons. The factory is equipped with modern machinery and employs more than 200 workmen, most of whom are Venezuelans. Many of these artisans have had years of practical experience in the manufacture of glass and are very efficient. The new furnace will enable the factory to turn out products at a greatly reduced cost. The plant, which is one of the most prosperous industrial institutions in the country, covers an area of 14,000 square meters, and is divided into six departments.—Rules and regulations have been issued by the executive power requiring the use of the METRIC SYSTEM in the Republic.—The President of Venezuela has appointed Gen. Octavio Escobar Vargas general representative of Venezuela at the Panama-Pacific International Exposition to be held in San Francisco in 1915. Sr. F. Jimenez Arraiz is chief of the office in charge of the preparatory work of the Republic in connection with the exposition.—The Government of Venezuela has signed an ARBITRATION TREATY with the United States for a term of five years. The treaty provides that all questions not capable of settlement by diplomacy shall be submitted to investigation by an international commission for at least one year.—It is estimated that the WATERFALLS in the vicinity of Caracas are capable of producing electricity daily to the amount of 30,250 horsepower. At the present time several cataracts are used in developing electric energy aggregating 8,750 horsepower every 24 hours.





Courtesy of *El Mercurio*, Barcelona.

PRESIDENT ISMAEL MONTES OF BOLIVIA AND HIS CABINET.

Seated from left to right: Sr. Don Carlos Calvo, minister of public instruction and agriculture; Sr. Don Casto Rojas, minister of the treasury; Sr. Don Cupertino Arteaga, minister of foreign relations and worship; the President of Bolivia, Sr. Don Ismael Montes; minister of government and promotion; Sr. Don Claudio Pimilla; Sr. Don Placido Sanchez, minister of justice and industry; and Sr. Don Nestor Gutierrez, minister of war and colonization.



VOL. XXXVIII.

JUNE, 1914,

No. 6

AN AMERICAN CELEBRATION IN SEVILLE, SPAIN

THE Old World has shown a great interest in events of their history relating to the New World, and naturally Spain, as the starting point of Columbus's voyages and the birthplace of so many of the famous discoverers, has taken the lead in celebrating centennials of such happenings as connect that country with America.

In Seville, one of the most charming and romantic cities of all Spain, but at the same time a city that has always been renowned for its enterprise and its ambition, a tribute was paid on the 19th of December last to Balboa, the discoverer of the Pacific Ocean. This celebration was given in the Casa Lonja, and was made of scientific and social importance. It took place in the large hall of that building, and was attended by the highest scholars and men of affairs of the city itself, and also by representatives from all parts of the kingdom.

While this meeting had as its particular purpose the payment of a tribute of honor to Balboa and the discovery with which his name is forever associated, it was intended to be the commencement of other commemorations which had their origin perhaps and certainly their inspiration in this discovery.

As offering a field for the study of every event which influenced, since the time of Columbus, the progress of Europeans into the unknown continent across the seas, the most interesting feature of the celebration in Seville is the permanent exposition of charts, maps, and related documents, which is now established in this building where all such archives are preserved.


The *Archivo General de Indias* has been for generations and still is the repository of many precious manuscripts to which had been



Courtesy of The Theosophical Path.


ENTRANCE OF THE HALL OF THE AMBASSADORS, ALCÁZAR, SEVILLE.

Seville, the heart of Andalucía, is one of the oldest cities of Spain. It was known and improved by the Romans, and three emperors were born in the neighborhood. The Goths occupied it, then the Arabs, and finally the true Spaniards. Of the architectural treasures indicative of Moorish occupancy the palace of the Alcázar is almost equal to the Alhambra at Granada. This Alcázar was begun in 1181, and though at times restored in bad taste, it preserves the full beauty of its style.



Courtesy of The Philosophical Path.

THE COURT OF THE MAIDENS, ALCAZAR, SEVILLE.
In the center of the Alcazar is situated the Hall of the Maidens (de las Doncellas), a charming room, or rather a court, around which various rooms are grouped according to the usual Moorish plan. The name itself and much of the tradition attached to this court are indicative of romance. Unfortunately, part of the poetry of the place is obscured by the history of its occupancy by Peter the Cruel, who left most strange and terrible memories.



Courtesy of The Philosophical Path.

THE HALL OF THE AMBASSADORS, ALCAZAR, SEVILLE.
This is considered the finest room in the great Alcazar. It contains examples of Arabic, true Moorish, Gothic, late Moorish, and Renaissance styles, and always arouses the admiration of visitors to it. Near by is a beautiful patio, which seems most appropriate to the subtropical climate in which Seville is located.



Courtesy of The Philosophical Path.

COURT OF THE CASA DE PILATOS, SEVILLE.

Besides the Alcázar, Seville has very many other beautiful buildings, both of the earlier Moorish occupancy, and of the later Christian settlement, although even then architecture was strongly influenced by what the Moors had left. This is quite evident in the palace known as the Casa Pilatos, which was commenced in 1500 and finished in 1533. It intentionally resembles the Alcázar, but is more modern, and in some details the Renaissance feeling has overpowered the Moorish. As can be noticed in the court (patio), the two styles mingle. It is, however, a fine example of a patio, so well suited for the climate of the subtropics in all parts of the world.

confided the history of Spain and the Americas. There have been loaned for its use also many documents of the same nature, from the Royal Academy of History at Madrid, from the National Library, and from the National Historical Archives. Together they form a collection of unique historical value, from which the future compiler of Americana can gather an inestimable wealth of material.

The most significant celebration in this regard, therefore, among the others taking place in Seville, was the Congress of History and Geography (*Congreso histórico-geográfico*), which was held in this same Casa Lonja. It began its sessions on the 25th of April and continued them through the 1st of May.

The opening session took place on the afternoon of April 25, in the Hall of Commerce in the Casa Lonja. It was principally devoted to the preliminary organization, and arranged for divided meetings of the two sections of history and of geography. The inaugural session, with its addresses of welcome, was held on April 26 at 3 o'clock in the afternoon, and was largely a social function at which were assembled much of the intellectual forces of the country. Many ladies, it is pleasant to note, attended.

The business sessions, with each of the two sections as above noted, occupied the full time of the 27th, 28th, 29th, and 30th of April. Both morning and afternoon were given over to the work, and many important articles on Americana were presented. These will be published later by the congress in its archives.

The final session was at 3 o'clock in the afternoon of the 1st of May, in the Murillo room of the Provincial Museum (*Salón Murillo del Museo Provincial*). There were again public addresses of congratulations on the success of the congress, and remarks on its results toward the increase of knowledge of the relations between Spain and the New World.

A gratifying part of the meeting was the arrangement for excursions around and about Seville, a city that lends itself most completely to such study and entertainment. The National Government was the host at one time, the city of Seville at another. Special attention was paid to the visiting delegates from abroad, and they were given opportunity to visit such historical places as the ruins of Italica, and the cities of Jerez and Cordoba. Everything to contribute to their comfort and enjoyment was placed at the service of these guests, even to guides for the city and interpreters for those who were so unfortunate as not to be able to speak Spanish.

Something more must be said about the character of this exposition, which was the starting point for the congress and the nucleus for its study, as well as for other investigations that may be carried on in the future. The Casa Lonja, where the General Archives of the Indias are held, was repaired to an almost perfect degree, without



Courtesy of "El Mercurio," Barcelona.

THE MARBLE STAIRWAY IN THE ARCHIVES OF SEVILLE.

The Casa Lonja in Seville was selected as the depository for the archives of special relation to what was called "the Indies." The building dates after the Moorish times, having been completed in 1598, to be used as an exchange for the increasing commerce of Seville. Extensive alterations have been made to prepare it for the proper housing of these precious documents.



Courtesy of "El Mercurio," Barcelona.

SECTION OF THE PATIO IN THE CASA LONJA.

The building containing the Archives of the Indies is an isolated quadrangle about 200 feet wide; the courtyard is of the Doric and Ionic styles, and to modernize it for the better accommodation of the manuscripts and maps deposited there, extensive changes have recently been made, especial consideration being given to the fact that the permanent exhibit of these collections was begun with the historical and geographical congress held in April, 1914.



Courtesy of "El Mercurio," Barcelona.

DOCUMENT ROOMS IN THE HALL OF ARCHIVES, SEVILLE.

Manuscripts, documents, and similar treasures are carefully packed in bundles and classified. The number will run above 2,000,000, all original. For preservation of the maps and such bulkier exhibits, the directors of the archives, in preparation of the congress just held and for permanent exhibit, had made many glass cases of a solid and durable character in which to keep them on view

injuring its architectural merit or appearance. The Government had appropriated 160,000 pesetas (\$32,000) for the use of this and future congresses (a Hispanic-American exposition is to be held in 1916), so that the building might be in good condition, and every effort was made to bring this about. Many mahogany cases were made, and in them—there are 142 in all—and in frames on the walls of the room a large number of maps were exhibited. In so far as was possible, all articles of the various collections were arranged in chronological order, so that in this graphic manner the history of America could be followed from the time of its discovery to the final independence.

Thus in Seville have opened most auspiciously an interesting congress and an exhibit of valued documents, adding once again to the opportunities of late offered to the students of the fascinating epoch of the discovery and occupation of America. That advantage will be taken of it there can be no doubt, and it is to be hoped that this slight notice of the celebration in the *BULLETIN* of the Pan American Union will direct many students to the treasures that now are so easily accessible.



SUMMER RESORTS IN ARGENTINA

IN Argentina it is becoming a popular habit to go to a summer resort in order to escape the uncomfortable days that mark the midsummer. As soon as the heat of early December (from 90° to 100° F.; 35° to 40° centigrade) makes itself felt, the people of Buenos Aires, of Rosario, Tucuman, Cordoba, La Plata, and other cities begin to think of an outing, and to plan tours to the seaside, the mountains, or to the river resorts within easy reach of the capital.

Among the mountain places are those near Cordoba, like Alta Gracia, Cosquin, Capilla del Monte, where good hotels can be found, with baths, golf courses, tennis courts, and other means of amusement, and where the climate offers a refreshing change. There are numerous riverside resorts like Quilmes, Olivos, San Isidro, or Las Conchas, but undoubtedly that which is the most fashionable, partly because it is within such easy reach of Buenos Aires, is the region called El Tigre, but which includes several near-by streams besides the Tigre itself.

Of seaside places there are Necochea, Miramar, Mar del Sud, and an Ostende, but the most popular and the better known resort, and the one that has attracted the greatest attention for a number of years past, is Mar del Plata.

Mar del Plata is on the Atlantic coast near Cabo (Cape) Corrientes, about 400 kilometers (250 miles) south of Buenos Aires. The surrounding region is marked by a pretty range of hills formed from the easternmost branches of the Sierra de Balcarce, and the climate is soft and healthful, yet bracing enough to fill the wants of those who need and are benefited by a thorough change of air. The ocean in front of it is always calm, the waters always blue, both being features that offer a constant charm to the city dwellers. It is for them a fascinating change from the dog days of the northern summer to the refreshing coolness of Mar del Plata after a journey by train of little more than six hours, and the open sea before them is a source of never-ending delight.

The people of Argentina have made of Mar del Plata, in little less than 20 years, a city of comfort and luxury even, where all the delicacies of modern life are to be obtained. There is excellent rail connection to all parts, with sleeping and dining cars; there are numerous hotels, of the highest class mostly, yet some of such moderate rate that those of modest purse can be accommodated; there are many private residences, costly or otherwise, and smaller houses for permanent or transient dwellings.

THE TERRACE AT THE WATER'S EDGE, MAR DEL PLATA.

Courtesy, *La Ilustración Sud-Americana*.



There has just been constructed at this fashionable bathing resort in Argentina a splendid terrace, which actually overhangs the water in some places and which will form a fine addition to the Rambla, along which visitors are so fond of promenading. Close to this sea balcony, as it may be called, are many chalets and summer houses of those who like to spend more than a few days in the place. Mar del Plata, by these recent structures, has become one of the most charmingly artistic centers of Argentine life.



RAMBLA OR PROMENADE AT MAR DEL PLATA.

Mar del Plata is situated 400 kilometers south of Buenos Aires (249 miles), and since the early eighties has become the most popular resort in Argentina for those wishing a change and a chance to take the refreshing sea baths. The splendid new building of the Rambla along the water front at Mar del Plata is already the fashionable promenade for everyone going to that watering place. This is, however, only one of the many diversions for visitors, although it offers in itself many of the attractions of life at a summer resort. The buildings fronting on the Rambla are clubs, or hotels, or shops, or restaurants, or residences, while the broad driveway near by gives opportunity for higher speed than walking for those who wish to cover more ground in less time.



ON THE MAR DEL PLATA GOLF COURSE.

In Argentina the game of golf is one of the most popular sports in which the people indulge. Many cities have links, and Buenos Aires has several. At Mar del Plata a course has only recently been completed, so that those who are not enjoying the baths at the seaside, may find recreation in the vigorous exercise afforded by golf. The gentleman in the center of the photograph is the governor of (the Province of) Buenos Aires, General Arias (recently deceased), and he is in a group of the Ministers, Senators, and Deputies of the Province, together with officials of the club.



THE OPEN SEA AT MAR DEL PLATA.

While this beautiful summer resort for the people of Argentina has all the interests desirable for entertainment on land, it offers also the diversions which would be expected at the seaside. There is bathing both in the salt water and in establishments specially prepared for the purpose, and there is considerable boating, the small yachts seen along the shore adding materially to the variety of the scene. As the driveway skirts the water for some distance, the sailboats are always in sight and prove a decided attraction.



THE MAR DEL PLATA CLUB.

Since this watering place has become so fashionable it has grown into a veritable city and has a club for city members or for guests who are visiting the place for the time being. This club has much of the air that characterizes the famous Jockey Club in Buenos Aires, and many of the members of the one are also members of the other.



THE RIO TIGRE.

One of the most interesting, delightful, and even famous resorts in the neighborhood of Buenos Aires, only 30 kilometers (19 miles) north of the city, is the boating place on the Rio Tigre. It has been called the Venice of Argentina, because several small tributaries of the Rio de la Plata form here a group of islands around which pleasure and excursion boats can ply. Tigre is the favorite resort of innumerable families living in the north of the Republic, and they have built on the shores of the rivers summer homes, chalets, and boathouses. Fine hotels and clubs make the whole place gay, especially on fashionable days, or when races are held, in which rowing clubs compete. No visitor to Buenos Aires, especially if he happens to be there in summertime, should fail to spend a day at this charming suburb.



THE TIGRE HOTEL AND THE TIGRE CLUB.

Close to the edge of the river, so that all the life on the water and along the bank can be enjoyed from its shelter, is the Tigre Hotel, famous in the history of the watering place as one of the most popular resorts of Buenos Aires. In front of the hotel runs the Rio Lujan, and it is a memorable sight to sit on the piazza and to watch the people pass by, in automobiles, in carriages, on foot, or in boats skimming up and down on the water.



A TIGRE RIVER ROWING CLUB.

There are a dozen or more clubs on the Tigre and the other small rivers in the immediate neighborhood, and they develop many excellent rowing crews. At certain seasons of the summer regattas are held, in which prizes are given for the most expert, and considerable friendly rivalry exists among these clubs. Besides the regatta days, which are attended by crowds of the people of Buenos Aires, there are other fashionable days (*días de moda*), when the river reminds the visitor of the Thames in England, and when the hotels, clubs, and private houses are full of people who have come out to spend a pleasant and healthful afternoon and evening.

The city of Mar del Plata lies in a small valley among the hills already mentioned, and has the best of municipal improvements. The broad streets are paved with asphalt, are regularly swept and watered, and are well shaded by trees planted along the sides. Skirting the shore for about 3 miles is a splendid avenue about 65 feet wide, completely macadamized, electric lighted, and with hotels, clubs, and buildings of this character along one side, while on the other is a fine terrace on which the people can promenade and catch the view of the open ocean.

One of the most attractive structures at Mar del Plata is the Rambla, a semicovered terrace built on pillars above the beach. It is over 1,200 feet long and 125 feet wide, and with its club rooms, baths, theater, meeting hall, and shops forms the fashionable rendezvous for the summer colony. The structure is in the Louis XVI style and faces both the sea and shore, the view thus uniting the natural beauties of the region roundabout and those of the city that has grown up to enjoy it.

Southeast of the city is the Mar del Plata Golf Club, founded in 1898. The course has received all possible care and attention, and is considered one of the best in the world. There are two sets of grounds, one of 9, the other of 18, holes, and play is open to novices or experts on one or the other. Society, it will be seen from this, has ample opportunity to enjoy itself, and there can be no surprise, therefore, at the popularity of Mar del Plata.

El Tigre is of quite another character. The watering place takes its name from the river on the banks of which it is built and was a pleasant summer resort during the earliest days of the city of Buenos Aires, being much older in this respect than its seaside rival. The climate even at this short distance to the north of the capital (about 19 miles) is noticeably milder, and in the hot nights of midsummer this watering place offers an agreeable escape from the crowded city. Its hotels, clubs, and numerous private villas are then filled with the youth and fashion of the city, and many visitors from interior points make El Tigre almost a home during the season.

The chief attraction of the river of the same name is the boating. There are at least 10 rowing clubs, each with its clubhouse, gardens, and lawn surrounding it, and the keen rivalry for the victory in the many regattas arranged between them is always a source of social entertainment and conversation. Col. Roosevelt, in his visit to the Tigre, said that the regatta he witnessed on the river was to him the most charming spectacle of all the many he had attended in Argentina.

These two watering places offer a contrast, so that a choice of pleasure lies in the hand of the city dweller. Both are delightful, both are fashionable, and both show a completeness of comfort and even luxury which can be used as a proof of the advanced cosmopolitanism in the Argentine Republic.

A COMMERCIAL TRAVELER IN SOUTH AMERICA¹ :: ::


RIVERA, ON THE FRONTIER OF URUGUAY.

DEAR MR. EDITOR: Since my last letter, written from Buenos Aires, I have been to Asuncion, in Paraguay, coming north by railway, and returning south by steamer to Montevideo. I have also been to some of the interior places in Uruguay, and after careful consideration, I have decided to enter Brazil from this place, taking in the southern section of that Republic as a country by itself. I therefore am making a stay at this pretty little town on the frontier of Uruguay, just for the purpose of writing a letter to you and squaring myself on all details before entering upon what is to me an untried field.

Do you know, I think sometimes I leave out a simple hint or so that might help my fellow travelers in preparing themselves for such a trip as this I am making. In fact, one such hint has been on my mind ever since I left Buenos Aires and got into the interior of the River Plate region. It is this: Whatever is left undone or omitted, one article must always be remembered in outfitting for a long tour in Latin America. Soap. Never forget to carry a good cargo of soap. At least a half dozen cakes of moderate size, which can be slipped into folds and crevices of the clothing, and therefore occupying practically no extra space, while a box of soap would, when things are packed snugly as mine always are, be in the way. I speak of this with some feeling, for I ran out of my own favorite brand at Buenos Aires, and had to buy a new supply.

Now, soap in Latin America costs money. You can get good soap in big cities like Santiago, Chile, or San Jose, Costa Rica, but it is expensive, according to our standards. The trouble is, however, that one runs out of it at most awkward places in the interior, and then, perhaps, nothing attractive can be found, or the price for any well-known brand staggers the purchaser. It looks so ridiculous in the expense account, too. But one must have his own soap, or suffer for the lack of it. I would apply this advice particularly to shaving soap in sticks, of which I myself am especially fond. I have just given away my penultimate shaving stick to a good friend and hope that I still have enough to last till I get back to New York. The next time I come, if ever there is a next time, I'll lay in a supply for two years; you may depend upon that.

¹ The sixth of a series of 12 articles commencing in the January number of the BULLETIN.



A STATION ON THE ROAD TO PARAGUAY.


The distance by the rail route (new) between Buenos Aires and Asuncion, Paraguay, is 933 miles, and the northern part runs through a comparatively undeveloped country that is rapidly being opened by this railway connection. In Paraguay itself the route passes over the Paraguay Central. Small stations like this at Yuty, are quite frequent, and they, with their surroundings, show the traveler how development is taking place.

I felt downright disgusted with myself, Mr. Editor, at allowing myself to leave Buenos Aires and Montevideo after having stayed there such a relatively short while. I could have devoted weeks more to the study of opportunities there, undoubtedly with advantage and I like to think profit to myself and my house, but even a commercial traveler must have some regard for his own and his employer's time and expense account, so I decided to get away and to move onward, realizing that there was a large field ahead of me yet.

Many of those I met in Buenos Aires advised me against going up the river into Paraguay and Asuncion. Common opinion seemed to be satisfied with the feeling that most business was initiated or at least controlled at Buenos Aires (or Montevideo) and that therefore the commercial traveler could do everything necessary in one or the other of these ports. This is playing the game blindfolded, I found out. On thinking the matter over with myself, I concluded that it was worth the time and money to see what this interior country was like, whether I could sell anything there, and what the promises for the future might be. It was self-evident that if I dealt only with merchants in Buenos Aires or Montevideo, I should be restricted in my sales by just such orders as they wished to give me and by just such kind of orders as they chose to reserve for my account. Whether my reasoning will apply to all travelers, I can not decide. Anyhow, to Asuncion I went, and for myself at least I am satisfied that the step was warranted.

Two ways are now open into Paraguay. The long-established route is by steamer up the Rio de la Plata, then the Parana, and as a third stage, on the Paraguay, beyond Corrientes. The junction of the Alto Paraguay to the east and of the Paraguay Rivers occurs about 40 kilometers (25 miles) above that city. As the Frenchman would say, that is not the way I took up the river, but the way I came back. I went up via the railway, which was just opened, although passenger travel was not well systematized, my own opportunity coming as a courtesy to a stranger and foreigner rather than to a routine tourist. I wanted very much to see this new country in South America, as contrasted with western Argentina or with the classic regions of the Pacific coast, because I could thereby learn just what was going on in the line of immigration and settlement, compared with conditions in my own great West, at home in the United States.

And, indeed, this is a new country, just like southern California, with a background of traditions and of history in which the docile natives were absolutely dominated by an idealistic religious order—in South America the Jesuits, but in North America (California) the Franciscans. So much one should know from reading, and one feels it on being actually within the country, but complete conviction of



A SETTLERS' CAMP IN PARAGUAY.

All through the Argentine territory of Misiones, and along the new line of the Paraguay Central Railway, the impression is very vivid that the country is fast opening to the immigrant, and that they have come to make homes for themselves. The native Guaranis also are seen, but the European, either from the south, or from north and east Europe, are those whose presence indicates the later character of the land. The wants of these settlers must be supplied, as they are to become Americans in a few years. Already, as can be noted, they have acquired the habit of drinking Paraguayan tea and of listening to canned music. It will not be long before they will demand other materials of home comfort.

the late awakening comes overwhelmingly after passing across the better known Provincias (States) of Entre Ríos and Corrientes and entering the Gobernacion or Territory of Misiones. The scenery is interesting, the climate (while I was there, at least, and permanent residents gave me the impression that it resembled Florida) is delightful, and the industries practically are all agricultural and pastoral, such as are to be found in land just open to settlement.

This last stretch on the railway to the Paraguay border—that is, through Misiones—is only just opened as far as Posadas, and from that station a ferry across the river (upper Paraguay) joins it at Encarnacion with the Paraguay Central to the capital, Asuncion. In this region everything smacks of the modern life so familiar in our own Southwest. Besides the aboriginal natives—the Guaranis—I saw many Poles, not a few Germans and other north Europeans, plenty of recently arrived Spaniards and Italians coming to a freshly opened country for work and perhaps a home, and several English high-grade contract men on the job with the railway. This all betokens an awakening, an intention to develop a land, wonderfully rich by nature, into a productive rivalry with the older portions of Argentina, such as Buenos Aires (Province), or particularly Santa Fe, which I am told it resembles. And this territory of Misiones, together with the southern part of the Republic of Paraguay, is just feeling the new movements of the twentieth century, practically uninfluenced by those which in South America were so characteristic of the nineteenth.

Let's see whether I can bring this home to the commercial traveler. As if he were leaving St. Louis, for example, he will leave Buenos Aires, a city of a million and a half, with all the culture and purchasing capacity of any city in Europe or the United States. He will pass through Entre Ríos and Corrientes, the same as our States, where he will find a relatively well established but still growing agricultural activity, as he might expect in Arkansas and Oklahoma, and then he will enter Misiones and southeast Paraguay, to be in the land of raw immigrants, of unfinished railway construction, of virgin soil, and the never failing tin can.

The tin can, Mr. Editor, in every portion of the globe it has been my lot to wander, is the advance advertisement of our industrial civilization. Other signals contribute to the recognition of our attack upon the resources of mother earth, but nothing so distinctly authorizes us to trace the first steps of progress as does the tin can. I have seen it (or them) far out on the mountains of Mexico, where surveying parties hoped to locate a line across the Cordillera and down to the Pacific. I have had a good meal out of it when crossing Honduras, miles off the railway but in a camp where engineers were setting up a modern mining plant. I have seen the natives in



A GENERAL MERCHANDISE STORE IN ASUNCION.

A careful examination of the contents of such a store will convince the traveler that the wants of the people, whether old residents or recent arrivals, are varied and by no means simple. They will buy almost everything, especially whatever leads to comfort and adornment. They demand good stuff and will pay for it. The manufacturer who meets these wants has a growing market ahead of him.



A COMMERCIAL BANK IN ASUNCION.

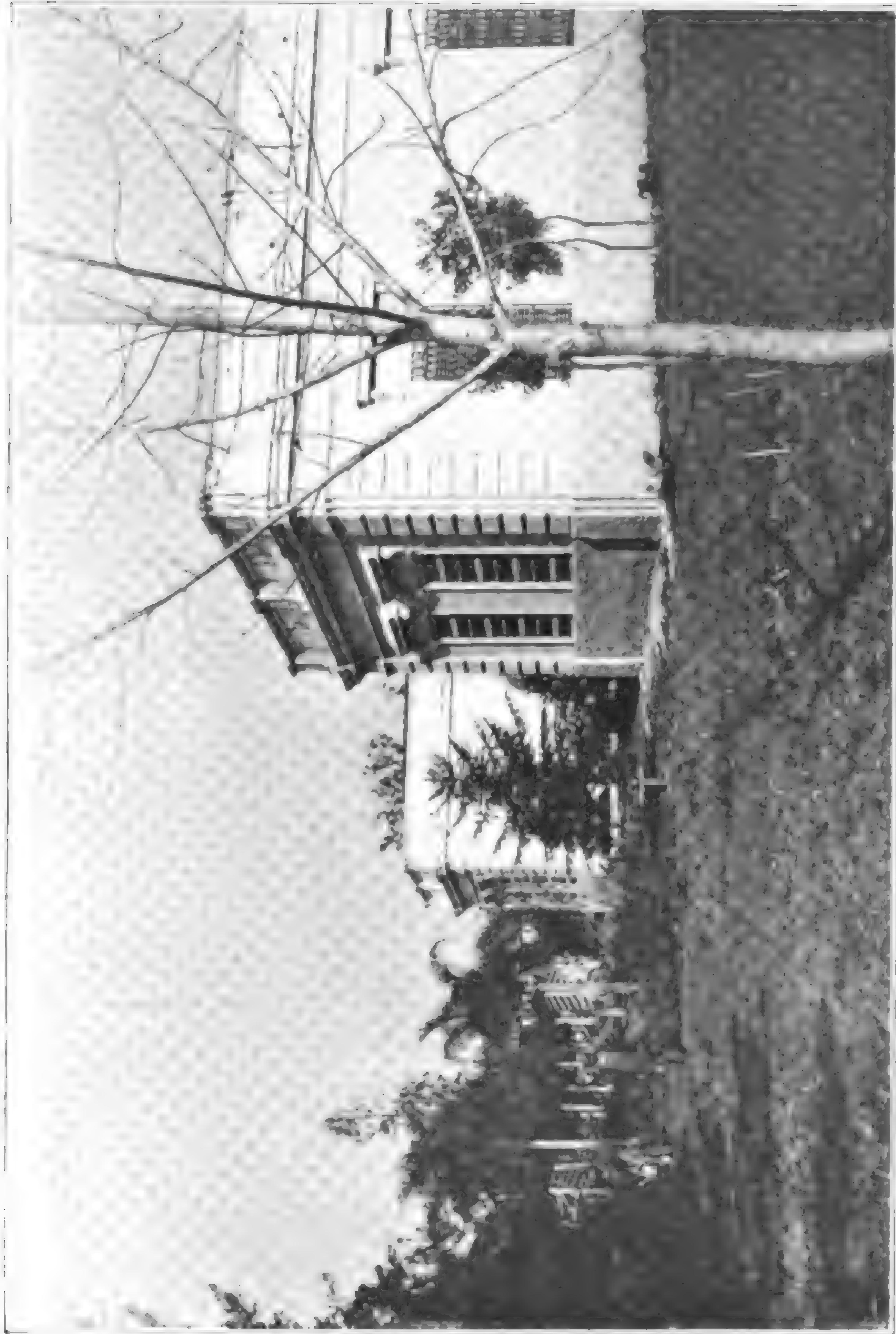
Such a modern building, and the fact that a bank occupies it, should do much to dispel the ignorance about Paraguay and the character of business done there. Asuncion is growing, as is all the region round about, and assuming modern ways.

Venezuela treasure it for flower pots and mold it over into drinking cups. Trekkers to promised homes in New Mexico or Arizona reckon it as among the most necessary of their domestic equipment. Here in the interior of South America I have found it proof positive of construction gangs on the railway. It marks the first simple residence of station masters and such operative agents, and is as surely indicative of the immigrant and colonist—the Pole, the Italian, and the German—who, within the next half dozen years, will be all over this region, growing corn, raising cattle, working in the saw-mills, taking up land for general purposes, and increasing the population generously, abandoning the tin can only when he has cultivated a garden of his own.

It is 943 miles from Buenos Aires to Asuncion, and it seemed to me that about the northern 300 miles of it had lately become discovered by intending settlers. Part of this is in Argentina, part in Paraguay. There is another area along a new line in construction toward the east, in Paraguay, which has much the same characteristics. All this means that there is a fine chance for the Yankee salesman. I myself have little to offer, because my line is outside the demands of a new settler population, but for much, very much of the requirements of a growing agricultural country, the United States should be the best possible source of supply. I do not mean that at this very moment a profitable business in general farm merchandise could be done. That would be an illusive hope for the merchant who thinks only of immediate gain, and the very purpose of his effort might be defeated.

The promise for business lies in the future possibilities. Here is a country which within a few years will have a population of thousands. Among them will be many natives, Guarani Indians, eager enough to assume the garb and habits of the stronger races by whom they are being pushed to the wall, but the active settlers will be immigrants who must have clothing, furniture, domestic and farm utensils, everything for house construction, and the simpler luxuries which people the world over crave and for which they will pay good money. Whoever finds out what is wanted and makes persistent efforts to sell it will in the long run develop a trade that must become a permanent gold mine, provided only a faint heart does not give up at the apparent slowness of things and that a well-trained imagination can look beyond the primitive crossroads *tienda* (store) and the stolid immigrant digging away at the side of the road.

I have allowed myself this particular digression, Mr. Editor, because it seems to me that we of North America know so little of these newer places in South America, so alike in many conditions to our own Southwest. I confess that my own information, guided undoubtedly to a great extent by my experiences in Central America



SUBURBAN VILLAS NEAR ASUNCION.


As Asuncion lies in a subtropical climate, and as the inhabitants are influenced to a great extent by the Spanish traditions of the place, the house construction, even of the latest pattern, is of the style to which they have grown accustomed. They are of one story, with cool interior, and usually have plenty of space for a garden around them.

and Mexico, had not prepared me for what I find. I was aware, of course, but rather dimly, of the immigration into Argentina, and had read, as one reads most books, of the colonists in Brazil. But I had not grasped the significance of what the movement meant. My experiences in Latin America had made me acquainted with the native stocks of Mexico, of Guatemala, and of Salvador. I based my judgments upon what I knew.

I pictured to myself, before I started, the isolated capitals of Quito and La Paz; I anticipated the older and classical cities like Lima and Santiago; I interpreted correctly the characteristics (I am not speaking solely of the commercial characteristics, although these should be predominant in my letters, but I include also the social and other aspects of these countries) of much of the west coast of South America, which, in many essentials, have followed lines similar to those in Central America. The smaller towns, like Arequipa in Peru, and Mendoza in Argentina; the seaports, like Guayaquil in Ecuador, Callao in Peru, or even Arica and Valdivia in Chile, did not seem unfamiliar to me. I acknowledged, if you remember, that Valparaiso and Buenos Aires astonished me with their differences from what I had fancied, yet they are so well known to the world that it was easy to change my point of view.

But on seeing some parts of Argentina I had my eyes opened. I discovered that Central American or Mexican experiences were not a sure guide to much of the newer area of South America. Rather was the consuming power of this eastern section to be gauged by what took place and is still taking place in our own Western States. There is only a slight variation from the comparison. In our United States we have an immigration largely from northern Europe, while in South America, although north Europe (Germany, Russia, and Poland) is represented, it is south Europe that sends the great majority of immigrants into Argentina and Paraguay. Nevertheless they are Europeans, already prepared to accept the standards acknowledged to prevail in what we call civilization, with an ambition to improve themselves as Americans, and therefore to demand whatever the New World has promised them, in addition.

The commercial traveler or the student must cease from talking solely in terms of the culture of the aristocracy, or of the traditional habits of the natives, if he wishes to interpret correctly conditions in the region of the River Plate. He must recognize that a great immigration movement is under way. That this immigration will increase till all these empty spaces are filled as our own northwest was filled by settlers and homemakers. That now, with better governments, and with statesmen possessing more sharpened insight into industrial and material conditions, with a broader patriotism and knowledge of affairs, these countries are growing just as our own country grew.



CALLE DE ZABALA, MONTEVIDEO.

Montevideo streets are well paved, and the buildings in the center of the city, where this picture was taken, are substantial. The business section is on a narrow stretch of land, and the streets running across it show a glimpse of the harbor at each end. Here are the chief commercial offices and the banks, but farther toward the large plazas and the residence section are large shops, a few having certain resemblance to the department stores of London, Paris, or New York.

This fact should be driven home to every manufacturer or commercial association who looks ahead for foreign markets. They must realize that countries like these, actively entering upon agricultural expansion, call for just those supplies which have contributed so much to our own success in conquering the wilderness. If our thoughts are confined to merely meeting the wants of the cultured classes of the South American cities—and by culture I do not restrict the word to what is best in art and fashion, but I expand it to what is proven to be most efficient in scientific, economic production also—we can apply the same rule to Lima that we do to the City of Mexico. If we try to meet only the simpler tastes of a native population, we can use our experiences gained in Guatemala to a farther removed market in Bolivia. But neither channel of trade, however well grooved it may be, will satisfy the needs of an agricultural community made up almost entirely of immigrants whose impelling purpose in uprooting themselves from the Old World is to Americanize themselves in the new. We already know, or ought to know, what such people want. We ought to be the first to satisfy their wants.

What if the business does not pay this year, or next year, Mr. Editor? That's no reason for being afraid of a foreign market. The man who looks at South America with an eye for immediate profit and no more might better stay at home. If he has the desire to establish a reputation for his goods so that their sales will increase as the population increases, he must have the courage of his convictions, and be determined to stick for at least five years. A test of the selling power of his product can not be made under that period.

Really I didn't mean to deal so much in generalities, nor to preach economies as if from a public platform. But I couldn't resist letting go a bit, when I have just learned such a lesson on my own account. I'll be back pretty soon on the highway again, but I must deliver a "thirdly," before I tell anything about Asuncion, Paraguay, or delightful little Uruguay. I want to call attention to a stumbling block the "Yankee" traveler encounters in all this territory, but how to remove it must be a solution from wiser heads (and fuller pocket-books) than mine. This, too, was a new experience to me, for in Central America I found no preponderance of competition; distance between producer and consumer was in favor of the United States, and often goods could be sold direct to the merchant who was usually a native and certainly was on intimate terms with the ultimate consumer.

In South America, on the contrary, I am constantly perplexed by the problem of what to do with my clients now that I become acquainted with the trade. I know that to try to perpetuate the relationship of seller and buyer, after I am away from here and the



CARTS CARRYING WOOL FROM AN ESTATE IN URUGUAY.

Uruguay is only behind Argentina in South America as a sheep-growing country, and in the season immense loads of wool can be seen at the stations of the railway. Some of it comes to the United States; but if our trade with Uruguay can be increased, more can be purchased for United States mills in exchange and as return cargoes.



A RAILWAY BRIDGE IN URUGUAY.

The railways of Uruguay are thoroughly well constructed, standard gauge being the rule. The rails and ballast are of the best, and the stations and bridges can compare favorably with those of any part of the world. At present the most important portions of the Republic are within reach of the railway, but there is room for many more lines. The commercial traveler need not leave the railway in covering the country, because he will find more than he can possibly attend to in visiting the principal places regularly scheduled in the time cards.


first delivery of goods has been exhausted, will be unsatisfactory. It is a long way from Buenos Aires to "the States." A letter with orders takes time, and a cable message costs much money. I begin to realize that, to maintain the encouraging trade already established, I shall be obliged to come again to South America, to demonstrate my sincerity and to make future sales. But, and this is what bothers me, can I come again? Or in the case of others, will they come again, when they have once made the tour and found out what a big purchasing territory it is?

Supposing I can not come again under a year, to revisit where I have already accomplished something, and perhaps to cover new ground, for I confess that I have by no means raked the ground clean, what can I do to keep my trade alive? I fear that it would be betraying my firm's secrets if I explained exactly what I have decided to do. But I can make the situation a little less complicated for those who may be reading these informal letters and who, I hope, can learn a simple lesson or so from my own personal experiences as I give them.

By all means (*a*) keep up through the mails the friendly associations once begun with customers, whether actual or potential. (*b*) At home a large firm would send its travelers regularly through the territory, but this rule can not always apply here; therefore the next best thing is (*c*) to have some one to act as local agent, who, if he does not actually solicit orders will at least accept them if they come through active solicitation of the home office. In "the States" what method is adopted by any large manufacturer in New York, or in Chicago, or St. Louis? Why, (*d*) he plants a local agent in San Francisco, or in Minneapolis and St. Paul, or New Orleans, to keep things moving. That has also been the case in Mexico, and these local centers kept the business alive. That's the true answer.

Supposing the expense of maintaining an agent in one of the capitals of South America seems out of proportion to the returns, is it not an easy matter (*e*) to find some man or firm to handle the present business and to develop more of it for the future? No, Mr. Editor; and that's one of the most deep-seated problems of all this South American market. To be sure there are, especially on the west coast, a few good general agencies, active, well acquainted with conditions, and loyal to the business offered them. On the east coast (so far as I have gone) there are large general agencies which have already had from 100 to 1,000 lines placed in their hands, and which as mere exporters and importers may be trusted to treat any house fairly. The majority of these are English or Germans, some are Argentines (or French or Italians)—only a very few are what we like to call Americans. To give any one of these the agency is the only resource.

Will this dependence upon such agencies expand our foreign trade? No. They are all good concerns, most of them getting rich and prob-



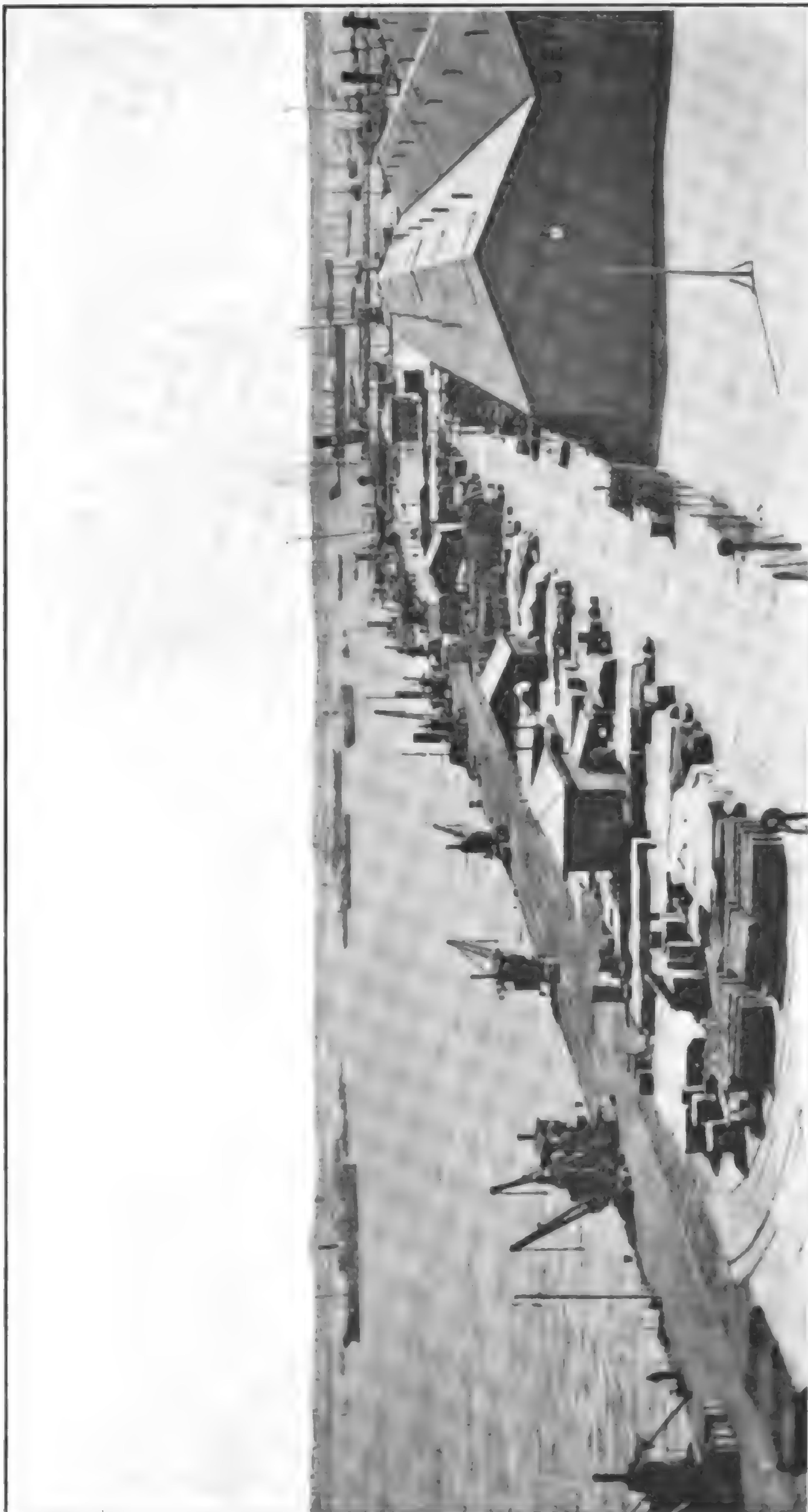
A MODERN TEXTILE MILL IN URUGUAY.

While Uruguay can not be called a manufacturing country, certain industries have reached a condition of activity. Cloths are woven by modern machinery, but the higher grades are still imported. In cities of the size of Montevideo the traveler should therefore note that the best market is for goods of the higher grades, and not necessarily for the cheaper qualities.

ably deserving their reward, but they are composed of human beings, working for themselves and what there is in it. You and I would do the same, and to expect otherwise will lead to disappointment in the long run.

What can we do about it—we in "the States" who wish to put our foreign trade on a permanent basis to see it increase from year to year? There is only one possible answer, provided a manufacturer or firm is not big enough to establish a local representative to handle the product at the selling end, and that answer is (f) combination. Two firms, three, a half dozen firms can get together and keep a man on the spot, in any one or several of the large commercial cities of South America. A manufacturers' association, a board of trade, a chamber of commerce (there is one such, I am pleased to say, in Buenos Aires), can with relatively small expense have a branch in the foreign field, the duties and functions of which must be to look after the interests and even to act as selling agents of the members of such an organization. No wonder my good friends down here are not so well informed as they should be about our splendid products at home. Who is there to tell them? The hurried commercial traveler, that flits through between steamers, and then has to beg some foreign agency to further propaganda for his wares? No, indeed. It makes the "Yanqui" sing very small when he ends his little cantata on the greatness of his house by asking the polite purchaser to apply for further orders to the German agency across the street. Those who may follow me will note the substantial character of the British, the German, the French, Italian, Spanish, and even Dutch resident representatives in this part of the world. Where is the "Yanqui"? Just about as scarce as his flag on a steamer through the Suez canal, and until we determine with all our energy to bring about a change in these conditions, we can not honestly claim to be abreast of our European rivals in the foreign field.

Pardon me, Mr. Editor, for running away from my personal narrative, but, when you come to think of it, these thoughts to which I have given expression are closely related to the experiences I started out to tell you about. This is my first visit to South America, and I am deeply desirous of adding to my country's influence abroad. This subject of permanent markets comes very near to me, and I know it must be equally as appealing to others whose interests are international. In fact, I have only touched the surface of the matter and leave to those with greater judgment the development of some practical scheme which will aid others who, like myself, are working in the trenches. I must not say more, although I feel that I could go on for pages. If I am right, the feeble suggestion given on this page will be the beginning of a careful study to bring the needed result. *Verbum sap.*



Photograph by Frederic A. Godding.

THE DOCKS AT MONTEVIDEO.

The harbor of Montevideo has recently been much improved, so that to-day steamers of deep draft can load and unload alongside the substantial docks close to the business portion of the city. The water front is well provided with modern machinery, and the warehouses are conveniently located for caring for merchandise. Goods imported for Montevideo, therefore, are as sure of sale and expeditious handling as if they were to be landed in New York.


It took three days, counting the start and finish, to reach Asuncion, the capital of Paraguay. After entering the Republic through the town of Encarnacion, the railway carries the traveler across a pleasant country, the only place of importance on the way being Villa Rica, at which I did not stop. This is said to be the second city in size in Paraguay, while Villa Concepcion, farther up the river (Paraguay) from Asuncion, is also an important commercial point; but neither did I visit that point, although to make a thorough job of it I ought to have done so. I mention these places as worth considering by anyone covering the region, because my own impression, gathered from gossip along the way, was that the country is growing in a healthy manner, and will soon have, if it has not already, a strong buying power.

Paraguay money, at least while I was there, was steady at $6\frac{1}{2}$ pesos for 1 paper peso Argentine, and Argentine money was taken on the street at almost its financial rate of exchange, or anyhow at 6 pesos Paraguay for 1 peso Argentine. As I found this out before I left Buenos Aires, I carried a stock of Argentine paper and sold it as need demanded. For instance, I received one day for 100 pesos Argentine just 650 pesos Paraguay. As I stated in my former letter, an Argentine silver (paper) peso equals close to $42\frac{1}{2}$ cents gold. Therefore at present a Paraguayan peso equals mighty close to $6\frac{1}{2}$ cents gold. There is talk of a more stable currency, as the Government is healthy and ambitious. My advice, for the present at least, is that the traveler depend upon Argentine money for his routine daily expenses and to save his gold for Buenos Aires and Montevideo.

Asuncion has some of the characteristics of Guatemala City, with perhaps a softer climate, no danger from earthquakes, and the big river in front instead of the towering mountains. I am not sure that I made all I came for, but I have at least a huge bookful of notes for my report when I get home, and have made myself ready for the future if good luck follows me. One's own judgment, what one has to sell, what the people will buy, must be the sole guide as to the desirability of coming up the river. I think, however, that the man with almost any line who takes his chances will not have regrets.

Coming down is quicker than going up the river. At the most, four days is taken by the voyage down, passing the towns of Corrientes and Parana and the large port of Rosario, mentioned in my previous letter. Should the traveler so wish, he can stop off at these places (if he has not already visited them) to see what he can sell there, or, as was my own trip, he can continue on to Montevideo, the chief seaport and capital of the Republic of Uruguay.

The money of Uruguay is fixed and definite. Uruguay is on a firm gold basis, and 1 peso gold equals \$1.034, or in quick calculation it is within accurate limits to say that 98 centavos equals one dollar. There is no gold in circulation, however, paper at par value being the



Photograph by C. F. Southwell, Lima, Peru. Courtesy of *Peru Today*.

BAD PACKING AND ITS CONSEQUENCES.

To supplement the illustrations in earlier letters of the results of careless and faulty packing, this picture conveys the lesson most successfully. The machine supposedly left the factory in proper condition, but it is doubtful whether its own maker would recognize it now, and whether the best mechanic here, 6,000 miles from its birthplace, could set up these parts and assure a working value to it. The consignee would have been willing to pay an added 10 per cent to its price for good packing.

general currency.¹ Of course on exchange at the bank I lost somewhat, but not enough to effect any difference in my expense account.

Uruguay is not Argentina, neither is Montevideo Buenos Aires; so much I have already learned, and it is a mistake to suppose that what goes in one place must necessarily be the thing in the other. There is as much difference as there is between Chicago and Louisville. Generally speaking, however, I found that the Latin tastes characterizes both countries alike.

Uruguay is of slower growth and is more homogeneously settled, and does not boast of many large cities outside of the capital, while, on the other hand, there are numerous smaller towns—neat, ambitious, thrifty, progressive, in which a selling campaign will well reward the energetic representative of certain lines who goes at it properly. Let me note two of them, others being approachable according to the time at one's disposal. Colonia is not so very far from Montevideo, and is growing. The same may be said of Minas, each of which require a separate trip from the capital. I heard of many more, but did not dare consider them, although I regretted passing them by, but, as in Chile and elsewhere, it was a question of elimination, and I could only take nibbles at the field, hoping to spread out in a wider circle the next time. Oh, that next time; how it does seem necessary, with my present experiences.

There are two ways of leaving Uruguay toward the north, if the trip into Brazil is to be made overland, instead of by the far more usual steamer route, Montevideo to Santos and Rio de Janeiro. In this case, you see, I violated my own rule, for I could not enter the Republic of Brazil through the capital city, and without inconveniently doubling back, hope to cover the south of the immense country from that as a center. Putting together the best information I could gather in Montevideo, I decided to come north by rail and work south Brazil as a territory in itself. The older road, so they tell me, is along the Uruguay River through Paysandu and Salto (good towns to visit, I am sure) to Uruguayana in south Brazil, and thence eastward to the coast. The newer all-rail route is straight northward to this frontier town of Rivera, where connection is now made to the cities in the State of Rio Grande do Sul, Rio Grande, and Porto Alegre. From Montevideo to Rivera, where I am now, is 352 miles (567 kilometers), a 15-hour journey across a pleasant pastoral and agricultural country, pretty nearly all of it under cultivation, so it appears from the car window, at least.

And here I am, ready to cross the border and to enter upon a territory the character of which is quite unknown to me, in spite of my experiences in Spanish America. What I discover about it I shall allow myself the pleasure of writing you when I have accumulated material and can find a few hours of leisure for putting my thoughts

¹ I find a bank statement somewhere that the gold coins of all countries are legal tender at values established by the Government of Uruguay.



SAMPLES OF PACKING FOR SHIPMENT ABROAD.

This is a very big box of merchandise, but it seems to have withstood the long voyage over sea and to have arrived in fine condition to be transported by railway into the interior of the country. It is a good rule to pack into the smallest possible box, but some bulky machinery demands large containers. Still, if every piece for foreign shipment were as well packed as this, there would be less complaint from foreign buyers.



SAMPLES OF PACKING FOR SHIPMENT ABROAD.

Another example of careful packing, where the manufacturer (and shipper) seems to have given personal attention to his order, and to have adopted a particular method to assure safety. The heavy padded rolls around both the small keg and the larger barrel beneath act like a fender between a dock and an approaching vessel. This scheme is worth remembering for delicate goods.

on paper. Just now I wish to add two paragraphs more, and then I must start this letter on its way, for my train leaves to-morrow morning, and a southbound mail closes this afternoon.

The commercial traveler will be delighted at the courtesy he receives from the business men to whom he tries to make a sale. No matter what the prospect, politeness will be the rule, and seldom will he meet a refusal of opportunity to display his wares. He must be careful, however, not to abuse or to misinterpret this courtesy. That nice psychological judgment which all successful salesmen possess and cultivate will soon detect a client who really wants to buy. The man who is indifferent will be just as polite, but he will be less easily interested if the foreign salesman becomes importunate. Better come again a second time rather than to assert that the next train or steamer is about to leave, etc. Yet I found that in most of the large cities, perhaps due to the fact that train service is fairly regular and travel therefore brisker and steadier, more promptness is shown in receiving a caller and permitting him to go ahead with his business. If I demonstrated that I had a good proposition to offer, I usually got a good start right there and then.

This brings me, Mr. Editor, to the end of my paper, with just enough space to give a condensed reckoning of my expense account since my last letter (the one from Buenos Aires). I think I ought to do this now, because I am leaving Argentina, Paraguay, and Uruguay, three Spanish speaking countries, to enter Brazil, a Portuguese country, where conditions will be different, and therefore should not be mixed with the others, especially as many salesmen may not take in Brazil in South America, preferring to come directly home after finishing at Montevideo.

In Argentina I spent six weeks, with travel to Bahia Blanca, Rosario, and other places included. In Paraguay, including train to Asuncion and boat down the river to Montevideo, I spent two weeks, and wish it might have been longer, because I felt convinced that there is a good deal to be accomplished there. In both these countries I used Argentine money, exchanging, as already explained, for local currency while in Asuncion. In Uruguay I was four weeks, including the railway travel and the extra time at this frontier town of Rivera, waiting to enter Brazil. I found my daily expenses about the same in Argentina and Uruguay and a trifle less in Paraguay. Altogether, for the 12 weeks, 84 days, it cost me \$785.50 (gold), estimating back to the original purchase price of my letter of credit and travelers' checks. An average, therefore, of \$9.35 a day. I might have done worse, Mr. Editor, and perhaps on my second trip I may do better, although I shall not try very hard, but I can not advise any man, fresh in this territory, to reckon on a more moderate expense account. He may save money, but he may also sell less merchandise.

VIAJERO.

ADOLPH F. A. BANDELIER¹

ADOLPH BANDELIER, archæologist, "the greatest man that ever, in behalf of the United States, studied the Spanish-American Republics," died in the city of Madrid, Spain, on March 19, 1914. The quotation is from a letter to the editor of the *BULLETIN* by another veteran archæologist, explorer, traveler, and writer of note, Charles F. Lummis, of Los Angeles, Cal. It is the tribute of a kindred soul, an old friend and "companion in arms," whose work has been along similar lines, and who is eminently qualified to judge. His estimate is not far wrong.

Like most great men, especially those of the older school of science who added to the sum of human knowledge without the beating of drums or the fanfare of trumpets, Bandelier was a plain, unassuming, modest man who did his work honestly, thoroughly, and well for the mere love of it. He shrank from a blatant publicity which might have given him the plaudits of the crowd, but his incomparable work has earned for him a fame finer and more enduring than that of many whose names may temporarily be more widely known. As long as man's study of man survives, the name of Adolph Bandelier will be revered by scholars and savants, and generations of students yet unborn will render homage to the genius and untiring labor which rescued from oblivion the stories of the ancient civilizations of the Western World.

The biographical data which are obtainable at this writing are scant and throw but little light on the personal side of the modest



ADOLPH FRANCIS ALPHONSE BANDELIER.

Born in Berne, Switzerland, August 6, 1840; died in Madrid, Spain, March 19, 1914. Traveler, explorer, ethnologist, archæologist, and historian. In his death the world of science has lost one of its great lights. Through the courtesy of his widow, Fanny Ritter Bandelier, The *BULLETIN* is enabled to publish this picture, made from a photograph taken in 1911.

¹ By Edward Albes, of Pan American Union staff.

man of science. For the benefit of posterity and for the gratification of hundreds who have profited by his labors, it is to be hoped that some time in the near future a full biography of Bandelier may be written by the one who is now bowed down in grief, the one who was his devoted helpmeet and companion during the last 21 years of his active, stirring life, his wife. Whether living amid the privations of the Aymara Indians on Lake Titicaca and its islands, climbing the rugged and ice-covered slopes of Illimani, digging into the long-hidden burial cysts of the prehistoric peoples of Peru and Bolivia, or tracing the traditions recounted in the musty manuscripts of the archives of Mexico or of Seville, Spain, by the side of Adolph Bandelier always was to be found Fanny Ritter Bandelier. It is to her we must look for a faithful portrayal of the character and personality of the lovable man whose scientific work stands as a monument to his genius and ability.

Bandelier was born in Berne, Switzerland, on August 6, 1840, and received but a meager education, being taken from school when but 8 years old. In his early youth he emigrated to the United States, embarking unsuccessfully in various kinds of business, until his life work was finally found in archaeology. In 1880 we find him at work, under the auspices of the Archaeological Institute of America, studying and exploring the ruins of the ancient pueblos in New Mexico, Arizona, and Mexico, and pushing his investigations even into Central America. In this work he was engaged until 1885. Before this, however, he had published two notable books, *The Art of War and Mode of Warfare* (1877), and *Tenure of Land and Inheritances of the Ancient Mexicans* (1878). His work for the Archaeological Institute resulted in the first instance in three monographs—*On the Social Organization and Mode of Government of the Ancient Mexicans*, *Historical Introduction to Studies Among the Sedentary Indians of New Mexico*, and *A Report on the Ruins of the Pueblo of Pecos* (1881). His Final Report of Investigations Among the Indians of the Southwestern United States, 1880-85, was not published until Part I appeared in 1890 and Part II in 1892. From 1885 to 1892 he lived in Santa Fe, N. Mex., and for three years of that time he was in charge of the documentary studies of the Hemenway archaeological expedition. It is to his energy, his clear and incisive logic, his careful studies of the fragmentary history of the early Spanish explorations and conquests of northern Mexico and the southwestern section of the United States, and the original explorations he made that we are indebted for the most reliable documentary history of that part of the world.

In these works many of the exaggerated tales of the early historians have been reviewed, examined, and reduced by clear logic to the elements of credibility; myth has been carefully separated from reality;

tradition has yielded up its kernels of truth; fiction has given way to fact; and Bandelier stands to-day as a leading authority on the remarkable and romantic history of the great Southwest.

In July, 1892, he was selected by Mr. Henry Villard, president of the Northern Pacific Railroad, financier, journalist, and philanthropist, to head an expedition into Ecuador, Peru, and Bolivia for the purpose of making archaeological studies and collecting interesting antiquities in the "Land of the Incas." While engaged in this work he met, and promptly fell in love with, his future coworker and companion through life, Fanny Ritter. They were married in Lima, Peru, December 30, 1893. His work for Mr. Villard continued until 1894, when the valuable collections he had made for the philanthropist were presented to the American Museum of Natural History at New York. After that time his work in South America continued under the auspices of that institution.

His first publication relating to his work in South America appeared under the title of the "The Gilded Man (El Dorado), and other Pictures of the Spanish Occupancy of America." This was published by D. Appleton & Co., in 1893, while Bandelier was still engaged in his researches in Peru and Bolivia. It is in this interesting little volume that Bandelier gives us the results of his careful investigations and researches relative to the origin of the story and the actual location of the fabled "Land of El Dorado"—that fatal *ignis fatuus* which led to suffering and death many a daring spirit who had come to seek fame and fortune in the New World.

The lure of gold has ever been the basis for brave exploits and bold adventure, and often about it has been woven the enticing web of mystery and myth to add to the zest of its pursuit. The ancient Argonauts sailed in search of the mythical Golden Fleece, while the golden apples of the mysterious Hesperides lured on the giant Hercules. The bold Phoenicians sailed to the shores of Spain to gather a golden harvest for the merchants of Syria, and the old Semitic navigators sailed out from the Red Sea to seek it at Tarshish and in the famed mines of Ophir, whose location is even now a mystery. The Portuguese, as early as the middle of the fifteenth century brought gold from the west coast of Africa, and it was to find a sea route to the gold and spice laden shores of the Far East that Vasco da Gama sailed around the Cape of Good Hope and Columbus finally ventured into unknown seas upon that memorable voyage of 1492.

It was not until the Spaniards had organized the pearl fisheries on the island of Margarita and had made several attempts to locate colonies on the mainland that we hear anything of El Dorado, the Gilded One. A small colony had been established in Coro, on the narrow, arid isthmus that connects the peninsula of Paraguana with the country around Lake Maracaibo, under Juan de Ampues, in 1527,

and it was from the Coquetos Indians who dwelt in this region that the legend was first obtained. Bandelier tells the story as follows:

The Spaniards had by their predatory expeditions excited the resentment of the Indians along the northern coast of New Granada, and those tribes, populous and rich in treasures accumulated by their trade with the interior, but little civilized, offered them a vigorous resistance. Their poisoned arrows were formidable weapons, and the thick woods gave them secure hiding places and natural fortifications. Rodrigo de Bastidas, having founded a settlement at Santa Marta in 1525, returned to San Domingo in consequence of an outbreak among his men. His successors, Palomino, Badillo, and Heredia, tried without success to overcome the gold-rich tribes of northern New Granada. They could advance no farther than the valley of La Ramada. Palomino was drowned, and a bitter quarrel arose between Heredia and Badillo, the adjustment of which was left to the Emperor, Charles V. Without regarding the claims of the two candidates, the Spanish Government appointed Garcia de Lerma governor of Santa Marta, with a new military force. At the same time the Emperor leased the Province of Venezuela, extending from Cape de la Vela on the west to Maracapanna, now Piritu, on the east, to the house of Bartholomäus Welser & Co., of Augsburg, and in 1529 Ambrosius Dalfinger and Bartholomäus Seyler landed at Coro with 400 men and took possession of the post for Welser. Ampues had to yield, and the Germans became lessees of a large part of northern South America. They found the colony of Coro prospering and the Indians in the neighborhood friendly. A story was current among these Indians of a tribe dwelling in the mountains to the south with whom gold was so abundant that they powdered the whole body of their chief with it. This was the legend of the "gilded man"—*el hombre dorado*, or, more briefly, *el dorado*, "the gilded." The story was based on a fact: A chieftain who was gilded for a certain ceremonial occasion once really existed, on the tableland of Bogota, in the Province of Cundinamarca, in the heart of New Granada. * * *

On this high plain, whose even, mild climate permitted the cultivation of the grains of the Temperate Zone, lived, in small communities, according to their several dialects, the agricultural village Indians, the Muysca. Isolated by nature, for the highlands that girt them on every side could be reached only through narrow ravines, they were entirely surrounded by savage cannibal tribes. Such were the Panches west of Bogota, and in the north the seminomadic kindred tribes to the Muysca, the Musos and Colimas. Engaged in constant war with one another, the Muysca lived in hereditary enmity with their neighbors. Yet these hostilities did not prevent an active reciprocity of trade. The Muysca wove cotton cloths, and their country contained emeralds, which, like all green stones, were valued by the Indians as most precious gems. But their most valuable commodity was salt. In white cakes shaped like sugar loaves this necessary was carried over beaten paths west to the Rio Cauca, and north, from tribe to tribe down the Magdalena, for a distance of a hundred leagues. Regular markets were maintained, even in hostile territories, and the Muysca received in exchange for their goods, gold, of which their own country was destitute, while their uncivilized neighbors, particularly the Panches and other western tribes, possessed it in abundance. The precious metal was thus accumulated to superfluity on the tableland of Bogota. The Muysca understood the art of hammering it and casting it in tasteful shapes, and they adorned with it their clothes, their weapons, and both the interior and exterior of their temples and dwellings. * * *

The numerous lakes of the plateau were holy places. Each of them was regarded as the seat of a special divinity, to which gold and emeralds were offered by throwing them into the water. In the execution of the drainage works which have been instituted at different places in more recent times, as at the lagoon of Siecha, interesting objects of art and of gold have been brought to light.

Among the many lakes of the table-land of Bogota known as such places of offering the lake of Guatavita became eminently famous as the spot where the myth of *el dorado*, or the gilded man, originated. This water lies north of Santa Fe, on the páramo of the same name, picturesquely situated at a height of 3,199 meters above the sea. A symmetrical cone, the base of which is about two hours in circumference, bears on its apex the lake, which has a circuit of 5 kilometers and a depth of 16 fathoms. The bottom of the lake is of fine sand. Near this water, at the foot of the páramo, lies the village of Guatavita. The inhabitants of this place about the year 1490 constituted an independent tribe. A legend was current among them that the wife of one of their earlier chiefs had thrown herself into the water to avoid a punishment and that she survived there as the goddess of the lake. Besides the Indians of the tribe of Guatavita pilgrims came from the communes around to cast their offerings of gold and emeralds into the water. At every new choice of a uzaque of Guatavita an imposing ceremonial was observed. The male population marched out in a long procession to the páramo. In front walked wailing men, nude, their bodies painted with red ocher, the sign of deep mourning among the Muysca. Groups followed, of men richly decorated with gold and emeralds, their heads adorned with feathers, and braves clothed in jaguars' skins. The greater number of them went uttering joyful shouts, others blew on horns, pipes, and conchs. *Xeques*, or priests, were in the company, too, in long black robes adorned with white crosses, and tall black caps. The rear of the procession was composed of the nobles of the tribe and the chief priests, bearing the newly elected chieftain, or uzaque, upon a barrow hung with disks of gold. His naked body was anointed with resinous gums and covered all over with gold dust. This was the gilded man, *el hombre dorado*, whose fame had reached to the seacoast.

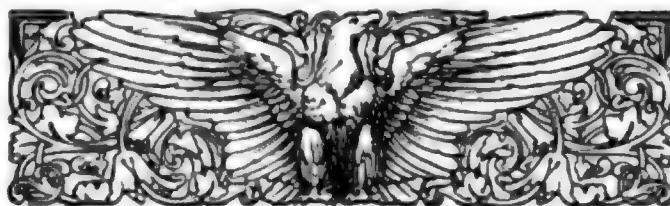
Arrived at the shore the gilded chief and his companions stepped upon a balsa and proceeded upon it to the middle of the lake. There the chief plunged into the water and washed off his metallic covering, while the assembled company, with shouts and the sound of instruments, threw in the gold and the jewels they had brought with them. The offerings completed, the chief returned to the shore and to the village of Guatavita. The festival closed with dancing and feasting.

Thus was the occasional ceremonial of a primitive tribe of Indians the real basis of a legend which passed from tongue to tongue until it lured men from far beyond the sea with the vain hope of conquest and of spoils. The legendary quest of the Golden Fleece pales to insignificance when compared with the romantic search for this mythical land of El Dorado, a search that was real and terribly earnest, and accompanied with toil, suffering, and death. Bandelier gives many interesting details of the various expeditions organized to conquer this fabled land, and the stories of fact read like the fiction of the novelist.

In July, 1894, Bandelier, accompanied by his wife, started for Bolivia. From La Paz they visited the ruins of Tiahuanacu, where they secured many valuable archaeological specimens, made notes on the architectural details of the ruins, and also made a comprehensive map or plan thereof. After about three weeks work there, they returned to La Paz and thence explored the slopes of Illimani, adding to their valuable collections from the ruins and burial cysts found at an elevation of 13,000 feet. In December they installed

themselves on the Island of Titicaca, the traditional home of the Incas. Here they remained for three and a half months, completely isolated from the outer world, prosecuting their explorations, excavating ruins, studying the traditions, manners, and customs of the Indians of the present as well as of past generations. Subsequently they moved to the island of Koati, where their studies were continued, and thence they returned to Peru, where a part of the year 1896 was spent in the preparation of the splendid work "The Islands of Titicaca and Koati" which was published by the Hispanic Society of America in 1910. This work, to which Mr. Bandelier modestly alluded in his preface as a "report," embraces within its covers the most authoritative account of the archaeology and folk-lore of this interesting region that is extant to-day. Particularly noteworthy is the chapter on Aboriginal Myths and Traditions Concerning the Island of Titicaca, while to the student his copious notes, dealing with the records that have been transmitted by the old Spanish chroniclers, furnish a most valuable compendium and bibliography. His portrayal of the character, customs, superstitions, and life of the Aymara Indians is incomparable, while his studies of the civilization of the Incas give us real facts instead of fanciful pictures painted in the colors of myth and tradition.

At the time of his death Mr. Bandelier was engaged in the preparation of a voluminous work, his *magnum opus* it was to have been, a "Documentary History of the Rio Grande Pueblos of New Mexico," the work being under the auspices of The Archaeological Institute of America. He and his wife had started their researches in the ancient archives of Seville, and death overtook him before the first volume was quite completed. His plans and much of the most valuable material, however, have been left in the hands of his faithful wife, and it is to be hoped that she will give to the world the fruits of their joint efforts and complete the great work.



THE EMERALD MINES OF COLOMBIA :: :: ::

THE best emeralds of the world come from the Republic of Colombia, in South America. The famous emerald of the Duke of Devonshire is a Colombian, as is also the equally famous stone in the Hope collection.

This source of emeralds was known almost immediately after the discovery of America, for the native peoples had used the stone in their own way, in some cases considering them as precious, with a strong religious significance. Before the discovery of America even, emeralds were known in the Old World, Egypt supplying some stones, and it is probable that the one mentioned in the Bible as worn by Aaron came from there. It is a tradition that Nero's famous lens with which he was enabled to increase his seeing powers, was an emerald. Various virtues were ascribed to the stones, and they were worn as charms and talismans.

Colombia supplies by far the larger quantities of emeralds. The Government does not, however, admit this mining as an open industry, restricting the deposits in the country to Government control and monopoly. The chief areas in which emeralds are found are near Bogota, the capital of the Republic, Coscuez, being one, and the better known Muzo, another. At present the concession is held by an English company, which can work the mines for 20 years, but may not extract more than the value of \$1,250,000 a year, as it is thought that by this means a depreciation in the market may be prevented.

As a mineral the emerald is a silicate, the combination being with oxides of aluminum and glucinum. Other stones have the same chemical combination, the difference in color being produced by varying proportions of the ingredients, and the value placed upon any one of them—emeralds as well—depending upon the intensity of color. Chemically the emerald has about 68 per cent of silica, 15 to 18 per cent of alumina, say 15 per cent of glucina, and small proportions of iron, lime, and chromium oxide. Much of the green depends upon the amount of chromium. The specific gravity is from 2.577 to 2.725, and its hardness is much less than that of the topaz.

A fine stone of 5 carats will cost about \$5,000, but such an emerald is rare. Others of less brilliancy and weight are of course of less worth. The emeralds from Muzo are celebrated for their color and "water," their clearness.

SCHOOLS FOR MILITARY TRAINING IN SOUTH AMERICA

IN many European countries military training is compulsory, and it is repeatedly stated by those who have studied the matter carefully that no other system has been or can be so successful in training the body and even the mind of the young; training, that is, not only in the simpler things of the mind and body—such as the proper, healthful way to live or the alertness necessary to receive a question and to give an answer—but also in the reasons that go to an understanding of a hygienic life and the discipline that must be part of the instinct of our social relationships. It is a strong argument that civilization advances faster where military training is most generally applied.

It is a matter of interest, therefore, to note that several of the Republics of South America have recognized the value of the idea of military training, and, although there may not be a declared purpose to inculcate the principle into the educational scheme, in certain instances good results are obtained by encouraging this spirit in the youth of the land. This is especially the case when it is remembered that some of the peoples are of aboriginal stock and that the governments are earnestly desirous of finding a practical means to bring them, through their own intelligence and cooperation, into an appreciation of that citizenship to which they are entitled.

The movement to establish branches of the "Boy Scouts" in all parts of the American Continent is a case in point. All children take kindly and enthusiastically to that organization. They enter heartily into the fellowship of it, and they are stirred by the spirit of helping others which actuates it. The military principle on which it is based is most attractive to them, and the discipline engendered, the recognition of authority brought out by the "Boy Scouts," will surely yield results that must last a lifetime.

Simply epitomized, then, the military school offers an education which can be obtained in no other way, and which is particularly effective where it has been administered with its educational purpose constantly in view. An appropriate illustration of this statement can be found in the military college at Rio de Janeiro, Brazil, which was founded at about the beginning of the Republic (1889) for the

PAN AMERICAN NOTES

AN HISTORIC MEETING OF THE GOVERNING BOARD.

THE meeting of the governing board of the Pan American Union on May 6, 1914, will go down in the annals of this organization as one of unusual interest and importance.

At that session the spirit of sympathy and cooperation, all-important factors in the development of better understanding and friendly relations between the countries of the Western Hemisphere, was manifested in a manner that was most encouraging and bore ample testimony of the practical value of the Pan American Union. During the meeting Secretary of State Bryan, who, as chairman *ex officio*, is the representative of the United States on the board, expressed his appreciation of the tender of three of the Governments of the Union, Argentina, Brazil, and Chile, for mediation on behalf of peace on this continent, to which the Brazilian ambassador, Sr. Domicio da Gama, replied in appropriate terms. At the conclusion of the remarks, Dr. Gonzalo S. Córdova, the minister from Ecuador, acting under instructions from his Government, introduced the following resolution, which was seconded by the other diplomats present, and approved by unanimous vote:

The Pan American Union applauds and supports the mediation offered by the Governments of Argentina, Brazil, and Chile, through the medium of their distinguished representatives, for the preservation of the peace of the American Continent.

UNITED STATES EMBASSIES AT ARGENTINA AND CHILE.

When President Woodrow Wilson affixed his signature, on May 16, 1914, to the bills which raised the rank of the United States legations in Argentina and Chile to embassies, he marked that day a red-letter one in the history of Pan American affairs. This action is a distinct step in the furtherance of better relations with the sister Republics of the Western Hemisphere, while the change in the diplomatic status of United States representation in those countries bears a twofold significance. It primarily reveals a gratifying appreciation on the part of the United States Government of the importance of bringing about the closest ties of friendship and intercourse with the countries to the south, and, secondly, it is a fitting recognition of the remarkable growth of Argentina and Chile. The President's signature was affixed to the measures in the presence of Sr. Dr. Rómulo S. Naón, the Argentine minister; Sr. Don Eduardo Suárez Mujica, the minister from Chile; Secretary of State and Mrs. Bryan; the Secretary to the President, Joseph P. Tumulty; Chief, Division of Latin American Affairs, Boaz W. Long; Confidential

Clerk to the Secretary of State, William F. Kelley; a number of prominent newspaper correspondents; and Director General Barrett, of the Pan American Union. After signing the bills the President expressed the hope for a continuation of the cordial relations in the following terms:

Let me say, gentlemen, how gratifying it is to me that it should fall within my time that this long deserved recognition of the full rank and sisterhood of your two countries should have been accorded. It affords me great personal pleasure, and I want to look forward, if I may, to the closer and closer relations with our sister republics whom we so honor and are glad to be associated with; and in the present circumstances, when you have so thoughtfully and graciously offered to show our common interest in the peace and righteous government of America, it is particularly fitting that this thing should occur. I appreciate your being here very much.

The respective ministers replied fittingly. The three gold pens used in signing these important bills were presented to the Minister of Argentina, the Minister of Chile, and to the Director General as a permanent memento to be added to the collections on exhibition at the Pan American Union.

ARGENTINA AND CHILE TO RETURN COURTESY.

Following the action of the United States Government in raising its legations at Buenos Aires, Argentina, and at Santiago, Chile, to the rank of embassies, the Director General has received significant cablegrams from the Minister of Foreign Affairs of those two countries, respectively, in response to his message of felicitation to them. Sr. Don José Luis Murature, Minister of Foreign Affairs of the Argentine Republic, stated:

The raising in rank of the legation in Argentina will contribute to bind closer together the friendly ties between the two countries and to affirm the idea of Pan American solidarity. Argentine Government will include in budget the creation of an embassy in North America, the bill to be introduced as soon as possible.

Sr. Don Enrique Villegas, Minister of Foreign Affairs of Chile, said:

This step has been received in Chile with the keenest satisfaction. I am glad to state that at the regular meeting of Congress in June next the Chilean Government will request necessary authority to reciprocate in a similar manner this act of courtesy of the American Government.

Since the receipt of these messages, the Argentine Government has raised its legation in Washington to the rank of embassy.

THE NATIONAL FOREIGN TRADE CONVENTION.

The National Foreign Trade Convention which met at Washington, D. C., May 27 and 28, was one of the most important conferences of its kind ever held. Nearly 500 leaders of commerce and industry in the United States, together with a number of high officials of the Federal Government, jointly discussed the various problems pertaining to the improvement of commercial conditions and the ex-

pansion of the foreign commerce of the Nation. The wide knowledge and practical experience of the speakers proved of great value to the merchants and manufacturers present in pointing out the way to secure the greatest development and highest efficiency in the production and marketing of their products at home and abroad. During each of the four sessions of the congress a distinct phase of commercial activity was carefully considered. The first meeting, presided over by Hon. Lloyd C. Griscom, former ambassador to Brazil and Italy and vice president of the Pan American Society of the United States, was appropriately opened with an address by the Secretary of Commerce, Hon. William C. Redfield. Present commercial conditions in the United States with special reference to foreign trade was the subject considered by prominent business men from the different sections of the country. The afternoon session gave its attention to a discussion of foreign trade as affected by the Sherman law, including topics dealing with banking, tariffs, and transportation problems. The meetings of the second day were devoted entirely to questions of foreign trade expansion under the following heads: The Panama Canal and Latin American Trade Possibilities; Our Colonial Possessions; South and Central America; the Orient; Australasia; American Export Trade to Europe. The Diplomatic and Consular Service, the Department of Commerce, and the activities of each engaged the attention of the delegates at the last session. An address on foreign trade and foreign loans was also given at that meeting. The serious business of the two days was temporarily suspended for an enjoyable banquet at the Raleigh Hotel on the evening of the first day. Among the speakers on that occasion were: Secretary of State, Hon. William J. Bryan; Secretary of Commerce, Hon. William C. Redfield; Hon. Theodore E. Burton, United States Senator from Ohio; Hon. Joseph E. Ransdell, United States Senator from Louisiana; Hon. Andrew J. Peters, United States Representative from Massachusetts; and Director General John Barrett of the Pan American Union.

The notable success of this gathering reflects much credit upon the general committee of arrangements which included: Chairman, Hon. Lloyd C. Griscom, former ambassador to Brazil and Italy, minister to Japan and Persia, vice president Pan American Society of the United States; Frederic Brown, secretary-treasurer Pan American Society of the United States; E. A. S. Clarke, president Lackawanna Steel Co., New York; Edward V. Douglass, secretary American Manufacturers' Export Association, New York; P. A. S. Franklin, vice president International Mercantile Marine, New York; James A. Farrell, president United States Steel Corporation, New York; John Foord, secretary American Asiatic Association, New York; Edward N. Hurley, president Chicago Pneumatic Tool Co., Chicago, Ill.; Charles E. Jennings, C. E. Jennings & Co., New York,

president American Manufacturers' Export Association; Alba B. Johnson, president Baldwin Locomotive Works, Philadelphia, Pa.; Waldo H. Marshall, president American Locomotive Co., New York; Charles M. Muchnic, manager foreign department, American Locomotive Co., New York, third vice president American Manufacturers Export Association; Charles A. Schieren, jr., president Charles A. Schieren Co., New York, vice president American Manufacturers' Export Association; Ellison A. Smyth, president Pelzer Manufacturing Co., Greenville, S. C., president Cotton Manufacturers' Association of South Carolina; Willard Straight, president American Asiatic Association, former consul-general, press correspondent, American representative in China for the American Banking Syndicate; Edward C. Simmons, chairman of board, the Simmons Hardware Co., St. Louis, Mo.; Eugene P. Thomas, president United States Steel Products Co., New York, and Hon. Henry White, president Pan American Society of the United States, former ambassador to Italy and France.

PANAMA-PACIFIC INTERNATIONAL EXPOSITION.

Coincident with the rapidly nearing completion of the Panama Canal and the information that in all probability July 1 of the present year will witness the passing of commercial vessels through the mighty waterway, comes the announcement that the grounds and buildings of the Panama-Pacific International Exposition are rapidly assuming definite form and shape. Artists and architects, builders and masons, are steadily combining their skill and efforts to make this exhibition worthy of the notable achievement which it will commemorate. Recent information indicates that already 36 countries, representing the different parts of the world, have signified their intention to participate, while a number of other countries have indicated that they will exhibit in an unofficial manner. Pan America is to be exceptionally well represented at this exhibition. Twenty of the 21 countries of the Pan American Union, have either made definite appropriations for this purpose or have passed enabling acts authorizing their respective commissioners to spend whatever sums are necessary. Of the foreign countries, Argentina leads with appropriation of over \$1,000,000; China follows with \$700,000; Japan and Canada, each with \$600,000; Brazil with \$500,000; Italy, \$400,000; Turkey, \$300,000; Cuba, \$250,000; Chile, \$180,000; Sweden, \$160,000; etc.

PROCEEDINGS OF THE DINNER OF THE TRAFFIC CLUB OF PITTSBURGH.

The Pan American Union acknowledges with thanks the receipt of a number of copies of the proceedings of the twelfth annual dinner of the Traffic Club of Pittsburgh. The pamphlet is attractive in its

typographic arrangement and contains 50 pages, including a statement of the objects of that organization and the program of the annual dinner held on the evening of March 27, 1914, at Memorial Hall in Pittsburgh. The remainder of the issue is devoted to the reproduction of the invocation by Rev. John McNaugher, the introductory remarks of the President, Mr. E. C. Sattley, of the toastmaster, Dr. Francis Harvey Green, and the addresses of the two principal speakers, President Daniel Willard, of the Baltimore & Ohio Railroad Co., and Director General Barrett, of the Pan American Union. On account of the numerous requests which have been received at this office for copies of the Director General's remarks on that occasion, we are especially pleased to have these copies for distribution.

THE COMMERCE OF MEXICO FOR THE LAST FISCAL YEAR.

In another section of the BULLETIN are given the figures for the commerce of Mexico for the fiscal year ending June 30, 1913, and, in comparison, those of the preceding year. It is gratifying to note that, despite the internal disturbances from which that Republic is suffering, its foreign commerce, both in exports and imports, had actually increased during this past fiscal year (1912-13). With some of the countries the foreign trade fell off, while with others there was a gain, notably in France, Spain, and Russia, from which the imports advanced remarkably.

PANAMA'S TRIBUTE TO WASHINGTON.

The Republic of Panama has recently paid a tribute to the memory of George Washington which is regarded with satisfaction by those who are interested in cementing still firmer the ties of confraternity among the American Republics. Exchange of ideals is a gratifying feature of international intercourse and such an exchange may assume any one of a number of different forms of expression. Sometimes it consists in copying successful institutions of government or education; at other times it may be the emulation of a notable incident in the life of an historic character; or more generally, perhaps, it is the recognition in some signal manner of the achievement of great heroes. Inspired by the latter motive, President Belisario Porras, of Panama, commissioned Walter S. Penfield, Esq., Counselor of the Panama Legation in this city, to arrange for the reproduction of one of John Trumbull's famous paintings adorning the Rotunda of the Capitol, the scene of Washington resigning his commission to the Congress at Annapolis. In execution of this commission, Mr. Penfield has received from the hands of the artist, M. A. Connolly, a reproduction in oil, and the picture, suitably framed, is now in Panama where, with appropriate ceremonies, it will soon be hung in the capitol of that nation. Elsewhere in this issue appears a picture of the painting.

NINETEENTH INTERNATIONAL CONGRESS OF AMERICANISTS.

The preliminary program of the Nineteenth International Congress of Americanists which will meet at Washington, D. C., October 5-10, 1914, has been issued, and a reading of its pages gives every assurance that this gathering will be a notable one from a scientific standpoint. As previously announced, the meetings will be held in the United States National Museum, the headquarters of the congress. Ample facilities will there be afforded for display of special exhibits and for the illustration of papers with stereoptican views. Both these features of the gathering will be taken advantage of by many of the delegates. Subjects on American anthropology, including physical anthropology, archeology, ethnology, philology, mythology, folklore, etc., will be discussed by eminent scientists and many original theories as well as hitherto unpublished results of investigations will be offered. In addition to the serious work of the congress, social receptions will be tendered to the delegates by the Pan American Union, Georgetown University, and the Archeological Institute of America. Excursions to neighboring points of interest will also be made. Following the conclusion of the congress, a postsession trip will be taken to the classical mound regions of Ohio, Illinois, Missouri, and New Mexico, the adjacent Pueblo ruins and cliff dwellings, and to the Indian reservations in that region.

DIRECTORY OF DISTINGUISHED LATIN AMERICANS.

To meet the growing demand from all over the world for reliable biographical data concerning the representative men in the public and private life of Latin America, Mr. W. F. Brainard, a publisher of New York City, with headquarters at 200 Fifth Avenue, has undertaken the publication of a Who's Who in Latin America. In the furtherance of his plans, Dr. Francisco Pulgar and Mr. C. L. Chester have started on a trip to the different countries of Central and South America, commissioned by Mr. Brainard, to personally get in touch with the prominent men and secure accurate and first hand information for this directory. On account of the vastly increasing interest in the Latin American countries it is highly desirable to have for consultation such a work describing the great number of men who are actually distinguishing themselves in the various activities of their countries. The title of the book will be "Distinguished Citizens of Latin America" and it is hoped that the efforts of those engaged in compiling the data will be encouraged and aided in every way possible. While the general scope of this work will be similar to Who's Who in America, a number of new features will be introduced such as an alphabetical index of the names, arranged by countries, by official

positions, and by professions and industries. It is planned to complete the book in time to circulate it at the Panama-Pacific International Exposition at San Francisco, 1915.

ANNUAL MEETING OF THE AMERICAN SOCIETY OF THE RIVER PLATE.

The growing influence and increasing membership of the American Society of the River Plate, in the Argentine Republic, are indications of the usefulness of that association. The report submitted by its energetic secretary, Mr. John Backer, at the annual meeting held in the American Church on April 14, 1914, emphasizes the patriotic objects of the society and directs attention to its efforts to unite the North American residents in Argentina, and to assist in properly caring for and entertaining prominent visitors. The meeting was presided over by George Lorillard, Esq., the chargé d'affaires of the United States at Buenos Aires, who reviewed the work of the society during the past year. Secretary Backer's report shows an increase in the membership from 166 to 225 during the year, makes special reference to the statue of Washington which the North American Colony presented to the Argentine Nation on July 4, 1913, and concludes with an observation on the reception tendered to Col. Theodore Roosevelt during his recent visit to that country. The officers elected for the coming year include Ralph W. Huntingdon, president; James A. Wheatley, vice president; John Backer, secretary; W. A. Kaser, treasurer; directors for three years, L. F. Taussig, R. W. Hardenbergh, R. D. Middlebrook; director for one year, J. J. Storey; auditors, J. C. Eccleston and L. F. McAuley.

PROBLEMS OF MUNICIPAL ADMINISTRATION.

The various forms of administration obtaining in the towns and cities of the United States have attracted the interest of a number of Latin American countries which are endeavoring to solve the problems of municipal government common to all growing communities. The inquiries received by the Pan American Union for data on this question from students of civil government as well as from officials would indicate its importance in those countries as well as in the United States. Among the most recent forms of municipal administration to which special attention is now being called is the city manager plan which embodies, in connection with the other officials, the services of a permanent professional expert administrator. The plan is receiving the support of the National Municipal League, and, according to its secretary, Mr. Clinton Rogers Woodruff, over a dozen cities and towns in the United States are now being governed under this system, although it has been

inaugurated only about a year. Mr. Woodruff, who is a member of the Philadelphia bar, is the able editor of the National Municipal Review, the official organ of the league, and has contributed a number of authoritative articles on questions of city government.

FOREIGN COMMERCE ASSOCIATION OF BALTIMORE.

The Foreign Commerce Association of Baltimore, Md., is to be congratulated upon its efforts to develop among the manufacturers and business men an appreciation of the importance of expanding the commercial influence of its city in Latin America. Ranking as one of the principal commercial centers in the South, the nearing completion of the Panama Canal and its consequent bringing into readier access a large number of Central and South American countries has awakened the city's desire to reap its share of the benefits as well as of the expected increase in that commerce. Under the auspices of the Foreign Commerce Association, an important trade meeting was held at Hotel Rennert, on May 7, 1914, at which Director General Barrett was principal speaker. Among other things, Mr. Barrett urged the association to send a well-selected commission of a limited number to make an extended tour of study through the countries of Latin America. The other speakers included the mayor of Baltimore, Hon. James H. Preston; Sr. Don César A. Barrianco, consul of Cuba at Baltimore; Eugene Blackford, president Chamber of Commerce; Charles E. Faleoner, president Merchants and Manufacturers' Association; and E. A. Stack, of the Joseph R. Foard Co. Mr. C. Stewart Wise, president of the association, officiated as toastmaster. Preceding the meeting, Mayor Preston officially entertained the Director General at a dinner to which were invited Consul Barrianco; John Sonderman, chairman Educational Committee; President Daniel Willard, Baltimore & Ohio Railroad; Gamble Latrobe, Northern Central Railway; President Samuel R. Gray, Western Maryland Railway; Mr. Wise; President John Hubert, of the second branch, city council; City Comptroller Thrift; City Solicitor Field, and others.

ELECTION OF PRESIDENTS.

The months of April and May witnessed the convening of the national congresses in a number of countries of Latin America and the dispatch of important business. In Venezuela, Cost Rica, and Peru perhaps the most engaging matter disposed of was the selection of presidents by these bodies. On April 19 the special plenipotentiaries from the legislatures of the United States of Venezuela met at the capital and selected Gen. V. Marquez Bustillos Provisional President, pending the general election to be held in accordance with the new

constitutional provisions to be enacted. May 1 the constitutional congress of the Republic of Costa Rica assembled in solemn session and declared Sr. Licenciado Alfredo González Flores president. This selection was made by virtue of a constitutional provision, which imposes upon that body the duty, in the absence of the president or vacancy of the office, of naming the designates (vice presidents), the first of whom shall exercise the power of chief executive. Since the elections of last December resulted in no candidate receiving a majority vote, and the two highest candidates having renounced their right of election, the congress has named as president Sr. González Flores, the first designate. President González Flores took the oath of office on May 8 for a period of four years. On the opening day of the Congress of Peru, May 15, Gen. Oscar Benavides was chosen president. Each of the newly elected executives has been identified with the public life of his respective country and has held various positions of importance.

ADDRESS BY MINISTER OF PERU.

In response to the numerous requests which have been received at this office for copies of the address on Contrasts in the Development of Nationality in the Anglo and Latin American, delivered by Sr. Don Alfonso Federico Pezet, the minister of Peru, before the Latin American Conference at Clark University, Worcester, Mass., Nov. 18-21, 1913, the speech has been published in pamphlet form and is now available for distribution, gratis, upon application to the Pan American Union.

TWENTY-FIRST WORLD PEACE CONGRESS.

An invitation to send delegates and participate in its deliberations has been issued to all associations, institutes, organizations, and to private individuals interested in the advancement of universal peace by the organizing committee of the Twenty-first World Peace Congress, which will meet in Vienna September 15-19, 1914. Questions of international law, international understanding, and measures for promoting world peace will be the chief topics discussed by eminent authorities and the delegates. An eventful social program has also been arranged in connection with the serious business. The historic interest of Vienna and its sister capital, Budapest, as well as the wonderful scenic beauties along the Danube, will combine to make attendance at this congress highly enjoyable. Further inquiries may be directed to the secretary, organizing committee, Spiegelgasse 4, Vienna, I.

CONVENTIONS AT THE PANAMA-PACIFIC EXPOSITION.

One of the most important features of the Panama-Pacific International Exposition will be the great series of congresses, conferences, and conventions to assemble in San Francisco between February 20 and December 4, 1915. As the material exhibits will show world progress on all lines, so will the congresses gather together the experience of the ages in education, science, art, industry, and social service. Two hundred and twenty-six congresses, conferences, and conventions have already been definitely scheduled for San Francisco during the exposition period. Both the American and the international associations are evincing the keenest interest in participating in this great series of national and international gatherings. With the exposition as a world forum, every conceivable line of human thought will have representation. Delegates will be present from practically all civilized nations. The plans that have been developed during the past two years by Mr. James A. Barr fully justify his selection for the highly important position of director of congresses for the Panama-Pacific International Exposition.

BANQUET OF CHARTER OAK CLUB OF HARTFORD, CONN.

Alive to the possibilities of the advertising profession in Latin America, the Charter Oak Club of Hartford, Conn., a member of the Associated Ad Clubs of America, listened to a number of interesting addresses at its second annual dinner held at the Hartford Club, April 30, 1914. Director General Barrett, as principal speaker, emphasized the importance of Pan America and friendly international relations, and then pointed out the opportunities for the advertising profession in the countries of the southern continent. Prominent advertising men from all over the country were numbered in the 400 guests who enjoyed the dinner and the numerous novel features connected with it. Arthur J. Birdseye, as toastmaster, introduced the speakers, among whom were George B. Kingsbury, Col. C. L. F. Robinson, C. E. Billings, Dan M. Wright, F. G. Macomber, Granville S. Standish, of Providence, R. I., C. B. Cook, J. P. Comstock, Silas Chapman, jr., and E. F. Burnham, men conspicuously identified with great advertising movements in this country.

MAGNETIC OBSERVATIONS OF THE CARNEGIE INSTITUTION.

Scientists and geographers have manifested considerable interest in an address of Dr. L. A. Bauer, Director of the Department of Terrestrial Magnetism of the Carnegie Institution of Washington, recently delivered before a joint meeting of the American Geographical

Society and the Association of American Geographers, in New York City. Dr. Bauer traced the voyages of the nonmagnetic ship *Carnegie* from 1909 to 1913, on its mission of following and tracing the lines of magnetic force in every ocean of the earth. Over 100,000 miles, or more than four times around the globe, is the record of this little ship to date. Dr. Bauer makes the pleasing comment that the ship *Carnegie* and its crew were received with the greatest courtesy by all the strange peoples visited on the various expeditions touching at nearly every part of the world. Describing the land stations from which expeditions sent out by the Carnegie Institution were taking magnetic observations, he told of stations in South America crossing the continent along the Amazon; expeditions in Central America; across Asia; Australia, from north to south, and east to west; expeditions in Africa carried on by English observers associated with the Carnegie Institution, and by American observers working across the Sahara Desert. The total number of land stations established has been 3,000, stretching from Greenland in the north to New Zealand in the south, covering a distance of more than 900,000 miles. Thirty-eight expeditions have now been completed, which have made magnetic survey of more than 1,000,000 miles of the earth's surface, by land and sea, in 94 countries.

FOUNTAIN PENS IN THE FOREIGN TRADE.

The fountain pen industry, while relatively small, is increasing in importance. While most of the pens of this character are consumed at home, there is yet a growing demand abroad for this article, and in all probability its popularity will expand as its usefulness becomes known. The latest returns from the Department of Commerce give an export of 309,200 fountain pens, with an average wholesale value of \$1.05 each. Among the Republics of Latin America in which the export trade is developed are Cuba, Panama, Brazil, Argentina, and Chile, although all the other countries take fountain pens in recorded quantities. There is still a large field for this peculiarly American product, and it is an encouraging sign that manufacturers are not slow in realizing it.

CENTENARY OF PEACE CELEBRATION.

Details are steadily being perfected for the celebrations which will commemorate the centenary of peace between Great Britain and the United States next year. The nature and scope of these exercises, it will be recalled, appeared in the April, 1914, number of the BULLETIN. Since the preparation of that data, the executive committee has announced the appointment of the following to serve as a sub-

committee on art and historic exhibitions, viz: Hon. Elihu Root, honorary chairman; Hennen Jennings, chairman; vice chairmen, Charles D. Walecott, Smithsonian Institution; Herbert Putnam, Library of Congress; Robert S. Woodward, Carnegie Institution; Charles C. Glover, Corcoran Art Gallery; John Barrett, Pan American Union; William H. Holmes, Gaillard Hunt, Walter M. Gilbert, Frederick B. McGuire, and Francisco J. Yáñez, as alternate vice presidents, respectively; Glenn Brown, secretary; and Miss Mabel Boardman, Beverly T. Galloway, J. Howard Gore, Gilbert H. Grosvenor, Chester Harding, Joseph A. Holmes, J. Rush Marshall, Miss Leila Mechlin, Adolph C. Miller, Logan Waller Page, W. de C. Ravenel, George E. Roberts, and William E. Shannon, members.

NEEDS OF A COMMERCIAL GEOGRAPHY OF LATIN AMERICA.

Many letters are received at the Pan American Union asking advice on the subject of textbooks to be used in giving instruction on subjects relating to Latin America. One of the most frequent inquiries is for information about commercial conditions, with especial reference to books and maps analyzing with systematic detail the products and industries of the Latin American Republics. What seems most needed is a commercial geography restricted to but embracing all of Latin America, which would therefore include Mexico, the West Indies, Central America, and South America. It seems that such a compilation is yet to be made. There are, to be sure, numerous commercial geographies of a general character, which embrace Latin America along with the rest of the world, and they serve a limited purpose. But, with the growing importance of Latin America itself, and with the very noticeable improvement in the general make-up of books of this character, there is a fine opportunity to prepare for students of a high school or advanced business school a textbook of commercial geography on modern lines, covering America in one volume, and the Pan American Union would welcome such an addition to its shelves.

THE MEXICAN DENTAL CONGRESS.

Through the courtesy of Dr. Leandro J. Cañizares, managing editor of the *Revista Dental* (Dental Review), of Habana, Cuba, the BULLETIN publishes in this issue a group photograph of the delegates to the Mexican Dental Congress held in the City of Mexico January 26-31, 1914. The congress brought together a representative number of leading dentists from the various States of the Republic, and many learned papers and addresses were delivered. Dental science

and surgery, oral hygiene, and other phases of odontology received due attention from the experienced physicians and practical operators in attendance. Skillful demonstrations and mechanical exhibits formed special features of the conference. The entire proceedings, according to official reports, were notably scientific and highly professional in character.

CHILEAN STUDENTS IN THE UNITED STATES.

Thanks to the public spirit of Sr. Don David Montt, a prominent Chilean living in the United States, a plan for sending young men from that country to this for the purpose of working in American factories and studying their methods, bids fair to be realized. The idea was first discussed by Sr. Don Eduardo Carrasco, chief of the commercial section of the Department of Foreign Affairs, with Col. Henry Kincaide, chairman of the Boston Chamber of Commerce party during the visit to Chile, but thus far little has been done in furtherance of the plan. Sr. Carrasco expressed the willingness of his Government to send a number of young university graduates to the United States, paying their expenses to the point of destination and providing for them during the brief period until they shall have become suitably placed. The commendable action of Sr. Montt in offering his services to carry out the details of the scheme which will tend to bring into closer relationship the commercial interests of both countries makes the outlook encouraging for its successful accomplishment.

THE INTERNATIONAL MUSEUM OF BRUSSELS.

The Pan American Union takes this opportunity to acknowledge receipt of the general catalogue of Le Musée International of Brussels, and of Supplement No. 1 accompanying it. Le Musée International was founded in 1910 by the World Congress of International Associations and has for its object the federating of all associations, congresses, committees, etc., with a view to bringing them into closer touch with one another, and for the purpose of serving as a central point to make known the aims and accomplishments of its constituent members. Special exhibits devoted to science, literature, history, and other fields of learning and activity are maintained here. Of interest to Pan America in connection with Supplement No. 1 just published is the fact that it contains a description of exhibits recently installed in its halls by the Social Museum of Argentina (Le Museo Social Argentino), by the Government of Guatemala, and by the State of California through the Panama-Pacific International Exposition and the California Board of Trade.

PAN AMERICA IN THE MAGAZINES :: ::

A naturalist's journey around Vera Cruz and Tampico, by Frank M. Chapman, curator of ornithology in the American Museum of Natural History, is an article in the May number of **The National Geographic Magazine** which appeals to that love of nature and interest in the wild life of forest and stream which inheres in almost all men regardless of race, color, age, or "previous condition." The section of Mexico in which Mr. Chapman conducted his studies of bird life presents a variety of climatic conditions, and hence a variety in fauna and flora which is, perhaps, unequaled in any portion of the world covering such a limited area. This is largely due to the variation in altitude from the sea level of tropical Vera Cruz to the snow-capped Mount Orizaba, which rises to a height of nearly 18,000 feet. The diversity of the interesting features of the country traversed by the naturalist is briefly touched upon in his introductory paragraphs as follows:

While fully aware of the high percentage of error most sweeping assertions contain, I nevertheless venture to claim that the country lying between the cities of Vera Cruz and Mexico City possess more varied natural attractions than any other area of similar extent in the world.

From the moment when, on the Gulf, one sights the still distant Sierra until one reaches the site of Tenochtitlan itself, one's attention is held by a variety of interests which make the trip from coast to table-land, and the snow peaks rising from it, an epitome of a journey from equatorial to boreal regions.

If one is in search of supremely beautiful scenery, it is here to and beyond the limit of human appreciation. If one would test the climates of the world, he may go in a day from perpetual summer to everlasting snow, and at the same time pass from belts where rain falls almost daily to others where it is rarely known. With these extremes of temperature and humidity there is, of course, a corresponding diversity in flora and fauna, which makes the region of exceptional interest to the botanist and zoologist, and particularly, as I shall endeavor shortly to show, to the student of the distribution of life.

For the archaeologist there are ruins which evince a high degree of aboriginal culture; and for the ethnologist, natives who, in retaining their tribal customs, offer problems of fundamental importance in connecting the present with the past.

The historic period opens with the incomparable romance of Cortez and Montezuma, of Aztecan and Tlaxcalan, and passes through three centuries of Spanish government, the war of independence, the short-lived empire of Maximilian, and the campaign of Scott, to the astonishing era of material development under Diaz, and the no less disastrous years of disintegration once his iron grip was loosened.

Thus, omitting all reference to natural resources and commercial possibilities, whether one be a student of nature or of man, or merely a tourist in search of the novel and beautiful, this portion of Mexico will appeal to him with a force and fascination which makes a journey through it one of the memorable experiences in a lifetime of travel.

Mr. Chapman's mission in Mexico was to make field studies and collect specimens and accessories for an American museum habitat group, designed to illustrate the effect of altitude on the distribution of life. In his opinion nowhere on the American hemisphere can this be done so effectively as in the country lying between sea level and snow line on Mount Orizaba. He writes:

Thus, in our journey from the Gulf to the summit of the Sierra, we pass through tropical, temperate, and boreal zones--the tierras caliente, templada, and fria, of the native. Our actual journey, in passing from sea level to snow line, may be a matter of 75 miles, our change of altitude approximately 3 miles; but if we were to seek the Canadian zone not on mountain top but on the coast, it would be necessary for us to travel to Maine or Nova Scotia. In other words, a journey of some 1,500 miles would be required to reach conditions which are here distant but three altitudinal miles.

It follows, then, that one can actually stand in a tropical jungle, where parrots, trogons, toucans, and other equatorial birds are calling from the liana-draped trees, and look upward to forests of pines and spruce, where crossbills, juncos, pine siskins, and evening grosbeaks are among the common permanently resident species.

In his article Mr. Chapman takes up the bird life of the tropical zone first, although on the trip described that section was visited last. The studies were made on a sugar plantation on the banks of the Tamesi River, about 35 miles by land from Tampico, and the author describes his awakening on the morning after their arrival in a manner which indicates the ideal conditions under which his researches were carried on:

We were awakened by the loud calls of flying parrots, not passing over at a great height, en route to some distant feeding ground, as one usually sees them, but stopping, with much conversational chatter, to join scores which were breakfasting in the trees overhanging our tents. At once we recognized the "double yellow-head" (*Amazona oratrix*) of the bird stores, rated by dealers as second only to the gray, red-tailed African parrot in its power of speech, and second to none as a whistler. With it was a slightly smaller, red-capped parrot (*Amazona viridigularis*), which, whatever it may be in a cage, is vocal enough in nature. Parrakeets of two species, with darting, dove-like flight, shot through the clearing, uttering their sharp, rolling cry, or, entering a tree-top, disappeared with incomprehensible completeness until, assured of the safety of their surroundings, they began slowly to move about in search of food.

Red-billed pigeons (*Columba flavirostris*), nearly as large as our domestic bird, shouted their emphatic "hurrah," and the dainty little scaled doves filled in the gaps with their quaint *put-a-coo*, *put-a-coo*; ground doves mourned gently, if inconsolably, and the pygmy owl (*Glaucidium*) whistled with clock-like regularity from the top of a leafless tree—a perch which this diurnal, light-loving midget prefers.

Great-tailed grackles creaked, snifflèd, whistled, choked, and rattled; queer little Mexican crows, looking not much larger than blackbirds, perched in flocks in the leafless trees, snoring and grunting; flycatchers twittered excitedly; Derby flycatchers (*Pitangus*) cried hip, hip, hurray; gold and black orioles whistled like schoolboys homeward bound; anis whined; golden-fronted woodpeckers coughed; and ever and again the big Mexican pileated woodpecker sprang his thumping, reverberating rattle with astonishing effect.

It was such a scene as one might well have dreamed of, but scarcely expect to find when waking; nor did it altogether fade with the rising sun. These birds were not only feeding but living near us, and when their early morning hunger was satisfied many of them were found to be nesting or preparing to nest within sight of our tent.

A ground dove sat calmly on her two white eggs in the heart of a small orange tree at the ranch-house door; a red-billed pigeon, for some reason dissatisfied with the site in which its nest was built, was moving it twig by twig to a new situation in a limb above our tent; a pair of pileated woodpeckers had taken possession of a dead trunk about 150 feet from camp, making the entrance to their nest directly beneath a large projecting fungus, which served as an admirable hood to their doorway; yellow-headed parrots were prospecting for a homestead in a dead tree on the river shore and appeared and disappeared in its hollow limbs in a manner which seemed to indicate they felt at home; while a pair of red-capped parrots were evidently much annoyed to find that a cavity which appeared to be acceptable was already occupied by a lizard about 2 feet in length, who refused to be dislodged, but continued to bask quietly at his threshold with, no doubt, irritating calmness.

During the week of their stay at this camp the party recorded no less than 88 different species of birds, 36 of which were tropical forms, which are here near the northern limit of their range. The expedition then returned to Tampico, where a launch was secured to take the naturalists to some islands located in the Tamiahua Lagoon, something over a day's journey south from the city, in order to continue their studies of tropical avi-fauna among the water birds. They finally landed on Pajaro Island in a small cove which afforded an ideal location for a camp. Crossing a narrow marsh which separated the beach from the dense vegetation beyond, this, according to Mr. Chapman, is what they found:

If we had suddenly opened the door of an overcrowded hen-house and thrown a bomb within, the change could not have been greater or the effect more surprising. Hundreds of birds which had been quietly resting at midday, with squawks of alarm, sprang into the air, and for a moment we were dazed by the confusion around us. But among the numberless herons of several species we could see dozens of delicately colored pink forms, while in nearly every tree was one or more nests holding young nearly as large and as pink as the parents which had just left them. We had at last reached the home of the spoonbill.

Further exploration revealed a surprising number of birds on the island. There were Louisiana and little blue herons in great abundance, a few reddish and American egrets, black-crowned and little green herons, wood ibis and black-necked stilts, snowy banks of white ibis, and probably 200 pairs of roseate spoonbills. Nearly all were nesting, and it was obvious that we had before us an unusual opportunity to record photographically, both with motion film and fixed plate cameras, the appearance and habits of some little-known birds. * * *

To go into detail is not possible at this time, and it may simply be stated that a series of plates and motion films were made illustrating the home life of the roseate spoonbill, valuable not only because they had not been made before, but even more valuable because, owing to the diminishing numbers of this rare bird, they may possibly never be made again.

The white ibises were nesting in low bushes under conditions which made photography as easy with them as it was difficult with the spoonbills. One had only to erect one's blind in the open spaces their nests faced and enter it, when forthwith the routine of ibis life was resumed. The young ibis were almost ready to fly and in their wood-brown plumage were as invisible as their parents were conspicuous.

One startling paragraph in Mr. Chapman's account is a terrible arraignment, in a few simple words, of the detestable fashion of

decorating stylish millinery with the plumage of wild birds, especially of the beautiful white egret. Even into this remote retreat the merciless plume hunter had found his way with the result that "the odor from the decaying bodies of white egrets, which stripped of their plumes by hunters, had been thrown into the semiliquid mud of the rookery, of their dead young in the nests above and water below" made the place almost unbearable.

In prosecuting their studies relative to the distribution of life in the Temperate and Boreal Zones of the plateau and Mount Orizaba, the party made Cordoba the base of operations. According to Mr. Chapman the whole region may best be seen from Cordoba. He writes:

The city itself is unusually interesting, the accommodations good, the climate agreeable, the surroundings picturesque, the vegetation luxuriant, the inhabitants thoroughly Mexican, and the views of Mount Orizaba of surpassing beauty. A railroad leads not only toward both coast and table-land, but another line goes south and still another goes north. Cordoba, with an elevation of 2,700 feet, is near the upper edge of the humid Tropical Zone, and in an hour or two one may go by train to the heart of the Tropics below or to the Temperate Zone above.

But Cordoba deserves chiefly to be known as the place from which Mount Orizaba may best be seen. From no other spot known to me is one more impressed by the dominating majesty of this great mountain. Towering more than 15,000 feet above one, its superb, sweeping, symmetrical outlines can be seen from flank to flank, from foothill to summit. A single view of this great volcano cone will enrich the remaining years of one's life with a precious memory. To be long enough with Orizaba to experience the ever-changing but never-failing demands it makes on one's love of the beautiful and sublime, and to realize its power to stimulate one's spiritual nature is an abiding inspiration.

The expedition ascended Mount Orizaba as far as the upper limit of life, thus completing their studies, and from the total collection of birds, trees, plants, paintings, photographs, and other data, were enabled to construct the proposed Habitat Group of Mount Orizaba as seen from the Tropical Zone at its base to the Boreal Zone of its summit. In conclusion, Mr. Chapman writes:

In due time this group was completed, and it stands, let us hope, for all time as a not inadequate representation of a mountain which, whether seen from the sea as a sun-kissed cloud, from the lowlands as a sky-piercing cone, or from the pine forests as a massive, glittering dome, always compels the homage we render a great personality.

A jaguar hunt on the Taquary is the subtitle of the second of the series of articles by Theodore Roosevelt now running in Scribner's Magazine under the general title "A Hunter-Naturalist in the Brazilian Wilderness," and which began with the April number. Col. Roosevelt's party had reached Corumba, having been joined on the journey up the Paraguay River by Col. Rondon and the other Brazilian officers who were to accompany the Roosevelt expedition. A hunting trip to "Las Palmeiras," a large ranch owned by Sr.

de Barros and located on the Taquary River, a tributary of the Paraguay, having been planned, Col. Roosevelt, Kermit Roosevelt, Col. Rondon, and several other members of the party left Corumba on a shallow river steamer on December 17 for the hunting grounds where jaguars and other game were said to abound. That the trip was a most interesting one may be seen from the following excerpts:

We went down the Paraguay for a few miles and then up the Taquary. It was a beautiful trip. The shallow river—we were aground several times—wound through a vast, marshy plain, with occasional spots of higher ground on which trees grew. There were many water birds. Darters swarmed. But the conspicuous and attractive bird was the stately jabiru stork. Flocks of these storks whitened the marshes and lined the river banks. They were not shy for such big birds; before flying they have to run a few paces and then launch themselves on the air. Once, at noon, a couple soared round overhead in wide rings, rising higher and higher. On another occasion, late in the day, a flock passed by, gleaming white with black points in the long afternoon lights, and with them were spoonbills, showing rosy amid their snowy companions. Caymans, always called jacarés, swarmed, and we killed scores of the noxious creatures. * * *

We were steaming between long stretches of coarse grass, about 3 feet high, when we spied from the deck a black object, very conspicuous against the vivid green. It was a giant anteater, or Tamandua bandeira, one of the most extraordinary creatures of the latter-day world. It is about the size of a rather small black bear. It has a very long, narrow, toothless snout, with a tongue it can project a couple of feet; it is covered with coarse, black hair save for a couple of white stripes; it has a long, bushy tail and very powerful claws on its forefeet. It walks on the sides of its forefeet with these claws curved in under the foot. The claws are used in digging out ant hills; but the beast has courage, and in a grapple is a rather unpleasant enemy in spite of its toothless mouth, for it can strike a formidable blow with these claws. It sometimes hugs a foe, gripping him tight; but its ordinary method of defending itself is to strike with its long, stout, curved claws, which driven by its muscular forearm can rip open man or beast. Several of our companions had had dogs killed by these anteaters, and we came across one man with a very ugly scar down his back where he had been hit by one, which charged him when he came up to kill it at close quarters.

As soon as we saw the giant tamandua we pushed off in a rowboat and landed only a couple of hundred yards distant from our clumsy quarry. The tamandua throughout most of its habitat rarely leaves the forest, and it is a helpless animal in the open plain. The two dogs ran ahead, followed by Col. Rondon and Kermit, with me behind carrying the rifle. In a minute or two the hounds overtook the cantering, shuffling creature and promptly began a fight with it; the combatants were so mixed up that I had to wait another minute or so before I could fire without risk of hitting a dog. We carried our prize back to the bank and hoisted it aboard the steamer. The sun was just about to set, behind dim mountains, many miles distant across the marsh.

Arrived at one of the landing places of the huge estate they were to visit, the party camped for the night, and early the next morning began the 20-mile ride on horseback to the main ranch house. The way lay through miles of virgin forest, affording an excellent opportunity for observing the flora and fauna of the country and comparing these with those of other sections of the world through which Col. Roosevelt has traveled. He writes:

Then for miles we rode through a beautiful open forest of tall, slender carandá palms, with other trees scattered among them. Green paraquets with black heads

chattered as they flew; noisy green and red parrots climbed among the palms; and huge macaws, some entirely blue, others almost entirely red, screamed loudly as they perched in the trees or took wing at our approach. If one was wounded its cries kept its companions circling around overhead. The naturalists found the bird fauna totally different from that which they had been collecting in the hill country near Corumba, 70 or 80 miles distant; and birds swarmed, both species and individuals. South America has the most extensive and most varied avifauna of all the continents. On the other hand, its mammalian fauna, although very interesting, is rather poor in number of species and individuals and in the size of its beasts. It possesses more mammals that are unique and distinctive in type than does any other continent save Australia; and they are of higher and much more varied types than in Australia. But there is nothing approaching the majesty, beauty, and swarming mass of the mammalian life of Africa and, in a less degree, of tropical Asia; indeed, it does not even approach the mammalian life of North America and northern Eurasia, poor though this is compared with the seething vitality of tropical life in the Old World. Until a geologically recent period, a period extending into that which saw man spread over the world in substantially the physical and cultural stage of many existing savages, South America possessed a varied and striking fauna of enormous beasts—saber-tooth tigers, enormous lions, mastodons, horses of many kinds, camel-like pachyderms, giant ground sloths, mylodons the size of the rhinoceros, and many, many other strange and wonderful creatures. From some cause, concerning the nature of which we can not at present even hazard a guess, this vast and giant fauna vanished completely, the tremendous catastrophe (the duration of which is unknown) not being consummated until within a few thousand, or a few score thousand years.

Several delightful days were spent on the ranch, the naturalists adding valuable specimens to their collection, while the hunters enjoyed the chase of unusual game. The first jaguar hunt is thus entertainingly described:

As our shabby little horses shuffled away from the ranch house the stars were brilliant and the southern cross hung well up in the heavens, tilted to the right. The landscape was spectral in the light of the waning moon. At the first shallow ford, as horses and dogs splashed across, an alligator, the jacarè-tinga, some 5 feet long, floated unconcernedly among the splashing hoofs and paws; evidently at night it did not fear us. Hour after hour we shogged along. Then the night grew ghostly with the first dim gray of the dawn. The sky had become overcast. The sun rose red and angry through broken clouds; his disk flamed behind the tall, slender columns of the palms, and lit the waste fields of papyrus. The black monkeys howled mournfully. The birds awoke. Macaws, parrots, paraquets screamed at us and chattered at us as we rode by. Ibises called with wailing voices, and the plovers shrieked as they wheeled in the air. We waded across bayous and ponds, where white lilies floated on the water, and thronging lilac flowers splashed the green marsh with color.

At last, on the edge of a patch of jungle, in wet ground, we came on fresh jaguar tracks. Both the jaguar hounds challenged the sign. They were unleashed and galloped along the trail, while the other dogs noisily accompanied them. The hunt led right through the marsh. Evidently the jaguar had not the least distaste for water. Probably it had been hunting for capybaras or tapirs, and it had gone straight through ponds and long, winding, narrow ditches or bayous, where it must now and then have had to swim for a stroke or two. It had also wandered through the island-like stretches of tree-covered land, the trees at this point being mostly palms and tarumans; the taruman is almost as big as a liveoak, with glossy foliage and fruit like an olive. The pace quickened, the motley pack burst into yelling and howling; and then a sudden quickening of the note showed that the game had either climbed a tree or turned to

bay in a thicket. The former proved to be the case. The dogs had entered a patch of tall tree jungle, and as we cantered up through the marsh we saw the jaguar high up among the forked limbs of a taruman tree. It was a beautiful picture—the spotted coat of the big, lithe, formidable cat fairly shone as it snarled defiance at the pack below. I did not trust the pack; the dogs were not stanch, and if the jaguar came down and started I feared we might lose it. So I fired at once, from a distance of 70 yards. I was using my favorite rifle, the little Springfield with which I have killed most kinds of African game, from the lion and elephant down; the bullets were the sharp, pointed kind, with the end of naked lead. At the shot the jaguar fell like a sack of sand through the branches, and although it staggered to its feet it went but a score of yards before it sank down, and when I came up it was dead under the palms, with three or four of the bolder dogs riving at it.

The jaguar is the king of South American game, ranking on an equality with the noblest beasts of the chase of North America and behind only the huge and fierce creatures which stand at the head of the big game of Africa and Asia. This one was an adult female. It was heavier and more powerful than a full-grown male cougar, or African panther, or leopard. It was a big, powerfully built creature, giving the same effect of strength that a tiger or lion does, and that the lithe leopards and pumas do not. Its flesh, by the way, proved good eating, when we had it for supper, although it was not cooked in the way it ought to have been. I tried it, because I had found cougars such good eating. I have always regretted that in Africa I did not try lion's flesh, which I am sure must be excellent.

As an example of the interesting observations recorded by Col. Roosevelt, the following account of the chase of two armadillos may be cited:

Our whole stay on this ranch was delightful. On the long rides we always saw something of interest, and often it was something entirely new to us. Early one morning we came across two armadillos—the big, nine-banded armadillo. We were riding with the pack through a dry, sandy pasture country, dotted with clumps of palms, round the trunks of which grew a dense jungle of thorns and Spanish bayonets. The armadillos were feeding in an open space between two of these jungle clumps which were about 100 yards apart. One was on all fours; the other was in a squatting position, with its fore legs off the ground. Their long ears were very prominent. The dogs raced at them. I had always supposed that armadillos merely shuffled along, and curled up for protection when menaced; and I was almost as surprised as if I had seen a turtle gallop when these two armadillos bounded off at a run, going as fast as rabbits. One headed back for the nearest patch of jungle, which it reached. The other ran at full speed—and ran really fast, too—until it nearly reached the other patch, 100 yards distant, the dogs in full cry immediately behind it. Then it suddenly changed its mind, wheeled in its tracks, and came back like a bullet right through the pack. Dog after dog tried to seize it or stop it and turned to pursue it; but its wedge-shaped snout and armored body, joined to the speed at which it was galloping, enabled it to drive straight ahead through its pursuers, not one of which could halt it or grasp it, and it reached in safety its thorny haven of refuge. It had run at speed about 150 yards. I was much impressed by this unexpected exhibition. Evidently this species of armadillo only curls up as a last resort and ordinarily trusts to its speed and to the protection its build and its armor give it while running, in order to reach its burrow or other place of safety.

Many other incidents dealing with the varied animal life of this region are given in instructive and entertaining detail, Col. Roosevelt seeming to have the faculty of injecting into his narrative so much of his own vigorous personality that not a single paragraph can be

termed dull or uninteresting. The party returned to Corumba in time to celebrate Christmas Day with the other members of the expedition, and the reader is left to await the continuation of the story in the June Scribner's.

The office of *adelantado*, by Roscoe R. Hill, in the December, 1913, issue of the Political Science Quarterly, is an instructive historical study of the significance and scope of a title and office which is frequently mentioned in connection with the early Spanish conquests in the western world, but whose exact import is little known except among close students of medieval Spanish history. When we read, for instance, that Bartholomew Columbus was the first of the Spanish "adelantados" in America, the question naturally presents itself, was this merely an honorific title, or did it designate an office with certain active functions, duties, and prerogatives? In answering this question the author has made quite a comprehensive study of the general and special codes, as well as early documents found in Spanish archives dealing with the matter. Some of the historical and most prominent features of the office and title are set out in the following excerpts:

The office of *adelantado* was one of the oldest conferred in medieval Spain. "In the history of San Pedro de Arlança it is said that Nuño Nuñez, judge of Castile, married Theudia, daughter of Theudio, adelantado of León." This statement carries the title back to the tenth century. More definitely it is known that Fernan Fernandez was *adelantado* of Estremadura in the time of Alfonzo VIII, the Good (1158-1214). The first mention of the office in Spanish legislation is found in the time of Ferdinand III (1217-1252), but it is not until the reign of his successor, Alfonzo X, the Learned (1252-1275), that the nature, qualifications, and functions of the *adelantado* were set forth in legal terms. They appear in the two general codes, *El Espéculo* and *Las Siete Partidas*, as well as in a special code entitled *Leyes para los Adelantados Mayores*. During the succeeding reigns, as occasion demanded, modifications and additions were made to this early legislation.

There were two kinds of *adelantados*. The *adelantado del rey, de corte, or mayor* was a more immediate representative of the King, while the *adelantado de comarca, fronterizo, or menor* was the more common type. Although of great importance, the former office seems early to have fallen into disuse, its functions passing to other high officials, since all mention of it is omitted from the later codifications.

According to the provisions of the earlier codes, the *adelantado mayor* was preeminently a judicial officer, occupying the highest rank in the judicial system as it was then established. The name of the office was derived from the fact that the subject was put forward into the King's place. Because of the many complaints about the decisions of the lower judges the King was naturally unable to hear all the appeals that were brought to him, and he accordingly appointed a supreme judge, who was called the *adelantado mayor* and who should act in his stead. The original jurisdiction of this officer extended even to controversies between nobles (*rieptos*), which might lead to wager of battle. His appellate power included all cases subject to appeal from the lower judges. * * *

The office of *adelantado menor* came into existence about 1239. The derivation of the name was the same as that of the higher official, for the *adelantado menor* was also to take the place of the King. According to the *Partidas* he was a very important official, "placed by the King over all the merinos, not only over those of the

districts and regions, but also over those of the villages." The chief distinction between the two offices lay in the fact that, whereas the judicial functions of the adelantado menor were not supreme, his administrative functions were more extensive than those of the adelantado mayor. He was thus a judicial officer endowed with extensive administrative powers and placed in charge of a certain designated district. As late as 1681, in the codification known as *La Nueva Recopilación*, provisions were included dealing with the adelantado menor. From that time onward the office fell into complete disuse. Because of the abuses committed by the adelantados menores they were supplanted by the alcaldes mayores.

The *Siete Partidas* provides that the adelantado menor must be a man neither proud nor haughty, and the *Nueva Recopilación* further specifies that he must be able to care for the royal interests and especially to protect the frontier districts from evil and danger. Like all other royal officials, he was obliged to take an oath to guard the life, honor, and priority of the King, to give his good counsel, to protect the royal property, to obey all the royal commands, and to fulfill the duties of his office well and loyally.

The judicial functions of the adelantado menor were both original and appellate. His original jurisdiction extended to all civil cases involving either the personal or real property of the residents of his district (adelantamiento) as well as to certain "specified matters of other districts." He had cognizance of all cases of justice, with the exception of *reicto*, broken truces, security of the King, and counterfeiting. In criminal matters his powers could be exercised only in the place where the crime was committed.

The adelantado menor was placed over lesser judicial officers (*merinos* and *alcaldes de villas*) of his district and was empowered to hear appeals from their decisions in all matters. In the performance of this appellate function, as well as in the exercise of all judicial powers, he was to be accompanied by persons learned in the law (*sabedores del fuero*) and also by a clerk, who should be provided with a book in which a record of all decisions should be kept. * * *

Not less important for the welfare of the adelantamiento were the administrative functions of the adelantado menor. He had to visit his district periodically, punishing evildoers and seeing that all received justice. Having finished the visit, it was his duty to make a report to the King on the conditions of the country. He was charged to take care of the interests of the district, especially avoiding excessive expense and annoyance to the inhabitants. He could appoint lieutenants, but these must be nobles or powerful persons. He also possessed the power of nominating alcaldes menores. * * *

Such were the nature and functions of the office of adelantado menor in Spain at the time she was laying the foundations of her colonial empire in the New World. Since the dominions acquired beyond the seas were regarded as Provinces of Castile, it was natural that the term adelantado menor or fronterizo, as it had been employed during the Moorish conquest, should be applied to the persons who were appointed to represent the Crown in these dominions. * * *

From the beginning of the sixteenth century capitulations or contracts were made by the Spanish Crown with ambitious men who sought to win fame and fortune through discovery and exploration in the New World. In the first years of the century, however, no higher office or title was granted than that of local governor of the region concerned, and even this was accorded only in exceptional cases. By the capitulation drawn up in 1512, however, Juan Ponce de León was promised the title of adelantado in case he found the land of Bimyny. In this promise of 1512 and in the actual grants of 1514 to Vasco Nuñez de Balboa, of the adelantamiento of the coast of the South Sea, and to Ponce de León, of the adelantamiento of Bimyny and Florida, is seen the real beginning of the use of the term adelantado in America.

It is from a study of these contracts between the Spanish Crown and the explorers that Mr. Hill arrives at a clear understanding of the duties, rights, prerogatives, and functions of the adelantados, the details of which are set out in a comprehensive manner in his article.

In Chile is the title of Col. Roosevelt's contribution to *The Outlook* of April 25, 1914. Relative to the trip from Mendoza over the Andes and of the city of Santiago he writes:

The ascent of the pass on the eastern slopes of the Andes was through a barren and desolate country. The line went through gray valleys, the steep slopes of the mountains towering on every hand. We sat on a seat in front of the engine for much of the time, and the scenery was wonderful. At one place, through a long ascending valley we saw the mighty peak of Aconcagua rising in its snows. Except in the Himalayas, there is no loftier mountain. At an altitude of some 10,000 feet we stopped at a station where there are a natural bridge and hot springs. Here a very attractive and comfortable hotel has been built, and many people come to it in the summer. In the winter the snows sometimes lie deep and interrupt the railway traffic.

When we crossed the Chilean boundary and began to descend the western slopes, the landscape, while retaining its grandeur, became less desolate. At one point we went by a beautiful lake. Flowers of many colors abounded, and there were trees and huge cactus, like one species of the cactus of Arizona. We passed at the foot of lofty cliffs and went through narrow gorges. This trans-Andean line is one of those railways which of recent years have made the grandest scenery of the world accessible to the ordinary traveler. * * *

The foothills of the Andes hem in the plain in which Santiago stands, and at the time of our visit in the late southern spring, November, snow still clung to their summits. But severe cold is almost unknown in the city itself, and palms of different kinds flourish side by side with trees, both native and imported, which belong to a colder climate.

Santiago is an efficiently policed, cleaned, and lighted modern city. As with all these large South American cities, I was struck by the attractive side of its social life, and by the healthy basis on which this social life rests. Here again, as in the Argentine and Brazil, it is the rule for the wife of the man in high social and political position to have a large family. The women are charmingly dressed; they are attractive; they speak French, and often English; and they are emphatically good wives and mothers.

Many social courtesies were extended to the distinguished visitors and these entertainments "were as charming as any similar entertainment in any capital of Europe would have been." A state dinner at the President's, a ball at the Jockey Club, visits to the races, and a unique afternoon tea and reception on the beautiful Cerro de Santa Lucia are noted. Another pleasant experience enjoyed by the Colonel was the following:

One of the pleasant functions was a quiet breakfast at the archbishop's in the old Archiepiscopal Palace, with its tree-filled inner yard and its heavily colonnaded galleries; the big rooms and private chapels were paneled, and the colonial woodwork and furniture were curiously carved and ornamented. Santiago was the seat of a bishopric from its foundation in the middle of the sixteenth century, and soon after Chile became an independent Republic the bishop was made an archbishop. The breakfast was given to Father Zahm and myself. At a previous dinner given for Father Zahm by Monsignor Duprat in Buenos Aires Father Zahm had quoted as illustrative

of the attitude of the United States in religious matters my statement while I was President that as President I had always behaved toward my fellow-citizens who were Catholics precisely as I would desire that a Catholic President should behave toward his fellow-citizens who were Protestants. As I think this pretty sound doctrine, I was pleased to have it again referred to in the little address of welcome made to me at the Archiepiscopal Palace in Santiago.

Knowing, doubtless, of Col. Roosevelt's interest in and hearty support of the Boy Scout movement in his own country, the Chileans arranged a special parade in his honor, of which he writes:

A specially arranged parade of the Boy Scouts took place at this oval in my honor. There were no less than 2,000 Boy Scouts assembled, not only from Santiago, but from some of the districts of northern and southern Chile. They were camped in the public park. Among the Boy Scouts there were Red Cross organizations for girls, and in the march past these were even more enthusiastically applauded than were the Boy Scouts themselves. Every healthy boy, whether of the United States or Chile or anywhere else, wants to feel that if the necessity comes he can be a soldier—he is not worth his salt and has not the slightest chance of making a good citizen unless he does possess this desire. Accordingly, the Boy Scouts organization, which does so much to produce the best qualities needed in peace, has also an undoubted value because it inculcates certain virtues which are equally useful in war.

In Chile, as in most other countries, the drill of the army has been on the German method. This drill has been extended to the Boy Scouts, and includes the parade step of the German infantry when they pass before the reviewing officer. The crowd was hugely delighted with the way in which, as each company of Boy Scouts passed the reviewing officers, the boys fell into the parade step in the most approved Potsdam fashion. An interesting feature of the Boy Scout movement in Chile, which was organized by Gen. Baden-Powell himself, is that it has been transported from Chile to Spain, where it is now flourishing. As I looked at the Scouts and realized how much the movement had meant for South America, I felt a very sincere feeling of gratitude toward the men who in my own country have taken up and pushed forward the movement.

The Colonel's high appreciation of the sterling qualities of the Chilean people as a whole, of their patriotism, and their military prowess, may be seen from the following paragraphs:

No one can go through Chile without being struck by the fixity and solidarity of the national type. Although there is much Indian blood among the lower classes, and very little indeed among the governing and directing classes, and although among the latter there are strains of Irish, English, French, and German blood mixed with the Spanish, yet the characteristics of all the classes taken as a whole show at least as much similarity as in any other country with a well-established national type, and much more than is shown by most countries. Moreover, for the great good fortune of Chile, there is in this type a strain of the heroic. The average Chilean, high or low, is intensely patriotic, and he has the fighting edge. There is in him a power, an energy, and an assertion of his own individuality, combined with readiness to merge that individuality in the common good, that, taken together, account for much of Chile's really noteworthy military success.

Like the Argentine, Chile has carried out the old American theory of an armed militia in effective and thoroughgoing fashion. All her young men are trained in the army for about a year, the training being so arranged that if they show special excellence in mastering and performing their duties they get off with much less time. My informants were a unit in telling me that the effect upon the national character had been wholly good, and had added to the bold and vigorous but somewhat turbulent spirit of the average man an invaluable habit of discipline and self-control.

A visit to the Cavalry School near Santiago aroused admiration and unstinted praise for the work of the institution and the consequent fine horsemanship of the Chilean cavalry. A subsequent visit to Talcahuano, the port of instruction and repair for the Chilean fleet, gives occasion for a brief historical review of some of the famous naval encounters between Chile and Peru, and appreciative comments on the splendid courage of the naval heroes of both countries. The article concludes with an account of a visit to a great ranch not far from Santiago, where the Colonel and his party were royally entertained and witnessed feats of horsemanship and skill by the native *huasos*, or cowboys, some of which are peculiar to the country and not to be seen elsewhere.

Pre-Columbian decoration of the teeth in Ecuador is the title of an interesting pamphlet in which is published a reprint of the article by Marshall H. Saville in the American Anthropologist, Volume 15, No. 3, July-September, 1913.

The finding of teeth inlaid with gold, turquoise, rock crystal, red cement, and other foreign substances, in the skulls and among the skeletal remains of aborigines who lived in various parts of the American Continents prior to the Spanish discoveries has been a matter of peculiar interest. Whether this insertion of foreign substances in the enamel of the teeth was always for merely decorative purposes or whether at times it may have been to serve a useful end has been a mooted question. The general consensus of opinion among anthropologists is that ornamentation was the sole object. Prof. Saville, who has made an exhaustive study of many specimens, is perhaps the leading authority on the subject. He writes:

Primitive personal decoration, wherever found and however practiced, is a subject of interest to the anthropologist. Man was ever vain, fond of ornamenting his person in a multitude of ways. He early learned the art of painting, tattooing, and scarifying his face and body, and pierced his ears, nose, lips, and cheeks for the insertion of ornaments of various materials and divers shapes, fondly imagining that he added to his personal appearance thereby, through which he attracted the opposite sex. One of the most singular ways in which the love of facial decoration has found expression is that in which the teeth have been operated upon, either by painting or staining, or by filing or cutting the ends into different forms, or, further, by the insertion of foreign substances into cavities artificially cut into or through the enamel in the front of the upper teeth. It is to this latter phase of dental decoration to which attention is called in this study. So far as we are aware, the type of decoration represented by the insertion of stone or metal into the teeth in the manner about to be described is not found outside of ancient America. * * *

In this connection, in a communication to the International Congress of Americanists held at Vienna in 1908, in giving a brief résumé of the results of his first archeological trip to Esmeraldas, Prof. Saville said:

Another custom which we have found in Esmeraldas, and which, so far as we are aware, is not present in any other part of South America, is the decoration of the teeth by the insertion of inlays in small perforations cut in the enamel of the upper

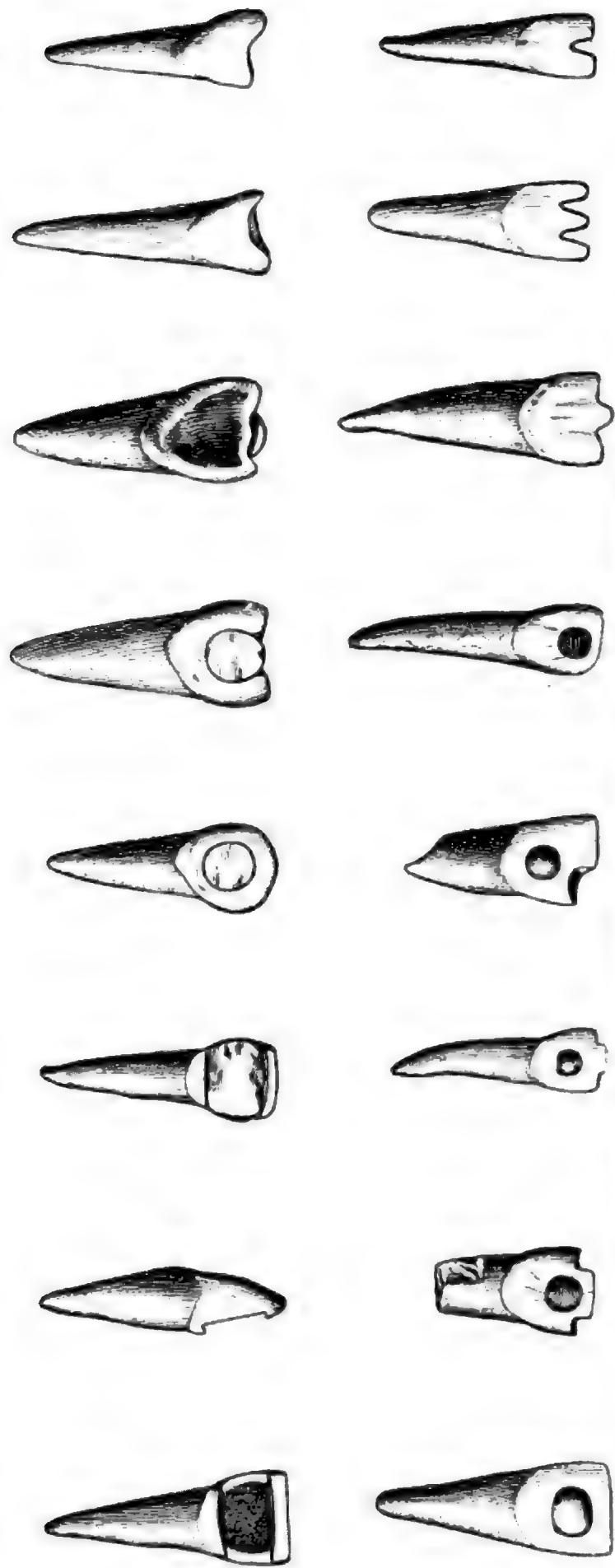


PLATE XIX.—DECORATED TEETH SHOWING OVERLAY, INLAY, AND FILING.

The third tooth in the top row is the one alluded to in the text as *c.*, showing the gold overlay described in connection with the La Piedra skull.

incisors. This custom of decorating the teeth was quite common in various parts of Mexico, where different settings were used. In the Mayan area, as far south as Salvador, the object most often used for the inlay was jadeite. In Mexico, for example in Oaxaca, I have found hematite used; in Vera Cruz, turquoise has been found; and in other parts teeth with settings of rock crystal, obsidian, and a red cement have been found. We have never heard of this custom in Colombia or Peru, but in Esmeraldas, in Atacames, skulls have been found with tiny disks of gold set into the teeth in the same manner as in Mexico and Central America, with the exception of the material.

Last summer Prof. Saville returned from another archeological trip to South America with numerous interesting specimens, among them being one of unusual interest, as may be seen from the following description:

In the spring of 1913, a Cholo, one of the natives of Atacames, a town in the Province of Esmeraldas, about 18 miles southwest of the city of Esmeraldas, found a skeleton in a burial tube in the right bank of the Rio Atacames, just above the town. The skull was found with the teeth inlaid with gold, but the finder contented himself by breaking off the superior maxillary, throwing the rest of the skull away. When I visited the town in June of the present year for the purpose of making some excavations to supplement my former work, I obtained the fragment. The two upper middle teeth are decorated by the insertion of thin gold disks in cavities drilled or bored in the enamel of the face of the teeth, as shown in figure 56. An unusual dentalfeat, in addition to the decoration, is found in the right middle tooth. This is not a right middle incisor, but a right lateral incisor which does not belong to the jaw but was implanted to replace the middle incisor. This is such an extraordinary feature that we must weigh very carefully the evidence as to its having been found in the jaw. Everything is in favor of this position; indeed, there is no reason to doubt that the replacement is a genuine pre-Columbian triumph of the ancient dentists of Atacames.

The occurrence of decorated teeth is extremely rare, very few specimens having been found, but this is not proof that the custom was not a common one in former times. The inhabitants of the little village are incapable of appreciating the archeological value of such finds, as they hold in little esteem objects of antiquity, which are found in great abundance, and there is no market for relics in this isolated place. The value of the gold inlays as bullion is very small; the owner sold the specimen for less than \$2, and I could have obtained it for less had I desired to follow the usual methods of trade. The tooth fits perfectly into the socket although as a matter of course, it is not so long as the cavity, this space at the end being proof that the original tooth was replaced by the implanted one only a short time before death; otherwise the growth of the bone would have filled it.

Although I have never before seen an implanted upper tooth in ancient America, we have an example in a lower jaw which I uncovered in an excavation at Copan early in 1892. Dr. Andrews, the well-known dental authority, has published a record of this find, as follows: "In the lower jaw of the skeleton was found the most interesting curiosity in the whole collection to dentists—a lower left lateral incisor that has been carved from some dark stone, and which has been implanted to take the place of one that had been lost. The tartar would seem to show that it had been worn for some time during life. This implantation antedates Dr. Younger's experiments by some 1,500 years * * *."

Perhaps the most interesting specimen showing the remarkable advance in dental surgery of these ancient operators is thus described by Prof. Saville:

By far the most transcendent example of teeth decoration which has at present come to light in America is in a skull discovered in 1909 at a place called La Piedra, near

the point on the right bank of the Esmeraldas River where it empties into San Mateo Bay. It was accidentally found by Mr. Pinzon and Mr. George D. Hedian, the latter the American consular agent at Esmeraldas, and was kindly presented to me by Mr. Hedian for the Heye Museum during my visit to Ecuador last summer. The skull was seen projecting from the bank, but no other parts of the skeleton were uncovered, probably having been washed away after the bank was undermined. The upper part of the skull is in fragments, but is restorable. The skull, slightly deformed, is that of an adult female. The decoration of the teeth is unique and presents a new type of facial ornamentation. Instead of small disks being set into artificial cavities, we find in this case, as shown in Plate XIX, c, that certain teeth of the upper jaw were almost entirely covered on the outer face by an overlay of gold. The entire enamel of the teeth decorated has been removed with the exception of narrow bands at the bases and the upper parts where they were close to the flesh and embedded in the jaw. The removal of the enamel is through to the dentine and was skillfully accomplished. It appears that in some instances sawing was done slightly under the enamel at the upper part, so that the gold overlay, or covering, might be fitted under it in order to make it more secure. The teeth thus practically "face-crowned" are the four incisors and the two canines. The overlays are missing in all but one of the teeth, the left lateral incisor. This gold covering is slightly folded or bent over each side of the tooth for greater security. * * *

The teeth which have lost the overlays show that the cutting extends toward the dentine 1 mm. or a trifle more. In the left middle incisor the vertical cut is 6.6 mm., the right middle incisor has a vertical cut of 6 mm., while the canines have 5 mm. In some of the cuts traces of a cement which aided in holding the gold fast to the teeth may still be seen. Unlike the fragment of skull which contains the disk inlays described above, the teeth are not worn down, and are in a splendid state of preservation. The teeth decorated are those which show when the mouth is opened in speaking, and are so covered that they must have had the appearance in life of gold teeth.

In filing the teeth and cutting out the enamel for overlays it is thought that certain kinds of stone were used with water. In cutting the cavities for inlay work stone drills, or perhaps hollow cane or bone drills, were employed with sand and water. No metal tools have yet been discovered in Ecuador by which the work could have been done. The question, How was the patient able to withstand the pain of the operation done with the most primitive of tools? is answered by Prof. Saville as follows:

Regarding the question as to the ability of the patient to bear the discomfort and pain of the operation, is it not possible that these people had discovered the properties of coca in producing local anesthesia? We know from archeological evidence, which I have brought out in my work on Manabi, that the people of the coast were addicted to the use of coca, chewing the leaves, mixed with lime, exactly as do the Indians of to-day in a large part of western South America. In view of this fact, it does not seem unreasonable to advance the hypothesis that coca may have been used, in some form, in dental work in this era, where, without question, a little-known branch of the South American Indians reached a high state of aboriginal culture.

A glance at Latin American civilization, by Francisco J. Yanes, Assistant Director, and secretary of the governing board, of the Pan American Union, is an able study, in the April number of *The Journal of Race Development* (Worcester, Mass.), of a civilization regarding which the average citizen of the United States is but little informed.

The completion of the Panama Canal has directed more attention to the Continent of South America than any international event of recent times, and articles such as this—informative, conservative, and just—are timely and worthy of wide publicity. A more intimate knowledge of the character of our neighbors, their moral and intellectual worth, their ambitions and ideals, is as necessary for the promotion of friendly and cordial relations with them as is an appreciation of the wealth and material resources of the countries in which they live. Himself a Latin American of scholarly attainments, who has lived for many years in the United States, the author is well qualified to portray a civilization he knows most thoroughly and to analyze the various elements which make it differ in some respects and resemble in others that of the country in which he now resides. In his introductory paragraphs Mr. Yanes writes:

The civilization of peoples can not always be gauged by set standards. There are varying factors to be taken into consideration and discrepancies to be accounted for in measuring the degree of cultural and industrial progress of a nation. Conditions growing out of racial characteristics, historical necessities, geographical position, custom and habit, on the one hand, and on the other the basic principles upon which different societies have been built, must not be lost sight of in dealing with, or rather in endeavoring to understand, the factors that have led to the progress of a given nation, or aggregate of nations of the same or similar origin.

Latin American civilization, from an Anglo-Saxon point of view, may be found wanting in many respects, but the life and happiness of nations, the ideals and hopes of their peoples, their legislation and institutions, are not to be found ready-made, but have to be worked out to meet peculiar wants, and in accordance with the racial, mental, moral, and material resources and necessities of each.

We must deal with Latin America as a whole if we wish to cast a rapid glance at its civilization. Some of the 20 free and independent States which in their aggregate make up Latin America have developed more than others, and a few marvelously so, but whether north or south of the Panama Canal, east or west, on the Atlantic or the Pacific, on the Caribbean or the Gulf of Mexico, the countries of Latin America sprang from the same race—the brave, hardy, adventurous, romantic, and warlike Spanish and Portuguese conquerors, who fought their way through unknown territories, whether in quest of “El Dorado” or in warfare against whole nations of Indians, as in the case of Mexico and Peru, where the native Indians had a marvelous civilization of their own.

On the other hand, the men who founded these United States, the Pilgrims who first set foot on this new land of promise, and those who followed in the wake of the first settlers, came to this country already prepared, through years of training, to govern themselves. They came to the friendly shores of the New World in quest of freedom. They wanted a home in a new land not yet contaminated with the spirit of the Old World. They brought with them their creed, their habits of order and discipline, their love of freedom, their respect for the established principles of law. Hence from its inception Anglo-American civilization was built upon solid ground. Its subsequent development—the marvel of the last half of the nineteenth and this our twentieth century—is due to the solidity of their institutions, their steadfastness of purpose, their practical sense of life, and a territorial expanse where all the soils, all the wealth, all the climatic conditions of the cold, the Temperate, and the Tropical Zone can be found. * * *

After giving a brief sketch of the geography, topography, natural wealth, river systems, and early discovery of the countries of Latin America, the author continues:

And so the civilization of what is called Latin America began with the first Spanish settlement, the first Indian blood shed by the greed of the white conqueror, and the first attempt to Christianize the inhabitants of the new-found land. The inevitable features of conquest—war, treachery, destruction, fire, sword, deeds of valor but little known, and endurance almost superhuman—marked along the trail of the discoverers the birth and first steps of the New World. And in the midst of this turmoil, bravely battling against unknown odds, the Spanish missionary fathers worked unceasingly, founding hamlets and towns, thus planting in the wilderness the seeds of many a large city of to-day, building their temples of worship, going from place to place struggling with disease and hunger, teaching the Indians the Spanish language and with it their religious faith, and laying the foundation of what is known to-day as Latin America.

The second stage of Latin American civilization began when the Crown of Spain finally took an active interest in its new possessions and men of a better class than the soldiery which landed with the discoverers and conquerors began to come to the New World, bringing their wives and daughters, and surrounding themselves with whatever comforts could be had in their new home. They were in many cases scions of noble families, who came either as viceroys, governors, or in some other administrative capacity, or as "oidores," judges, and men of letters in general. There also came learned monks, and among these philosophers, poets, musicians, painters, etc. Hence some of the oldest descriptions and chronicles of Latin America are in verse or in choice prose, either in Spanish or in Latin, and we find in some of the oldest cities in Spanish America wonderful examples of wood carving, either in churches or in old houses, beautiful specimens of the gold and silver smith's art in ware of the precious metals, some fine paintings, and unexcelled samples of the art of illuminating books, particularly missals. * * *

We Latin Americans record with natural pride the fact that the first university founded in the New World was that of Santo Tomas de Aquino at Santo Domingo, in 1538. This university is no longer in existence, but we still have that of San Marcos at Lima, Peru, founded in 1551; the University of Mexico, established in 1553 and refounded in 1910; the University of Cordoba, in Argentina, dating from 1613; that of Sucre in Bolivia, founded in 1623, or 13 years before Harvard, and that of Cuzco, in Peru, established in 1692, or eight years earlier than Yale. The University of Caracas, in Venezuela, dates from 1721, and that of Habana, Cuba, from 1728, the other universities founded before the nineteenth century being that of Santiago, Chile, in 1743, and the University of Quito, Ecuador, in 1787.

The author briefly sketches the revolutionary period from 1804 to 1825, recounting the heroic struggles for independence and referring to the many patriotic men who have illuminated the pages of Latin American history; traces the subsequent period of the gradual building up of the republics, the problems which confronted them, and their peculiar environment and unusual conditions. He concludes with a graphic picture of the remarkable progress in the material as well as in the intellectual development of the people, and gives us a glimpse of what is really the Latin America of to-day.

The inherent wealth of Brazil is the title of an informative article by J. C. Oakenfull in *The Financial Review of Reviews* (London) for May, 1914. Mr. Oakenfull is the author of a series of yearbooks on

Brazil and is thoroughly informed on his subject. At the outset he deals with the abnormal and transient situation as to the present tightness of the money market and the restrictions of credits, etc., shows the reasons therefor and predicts an early recovery from this temporary flurry. In speaking of the internal difficulties of the State of Ceara as having added to the ridiculous scare, and the relatively little importance to be attached to this in its real effect on the national prosperity, he adds:

This part of the Republic, however, is destined to become one of the most prosperous as soon as the gigantic irrigation works in hand are completed. The largest reservoir in the world is in course of construction at Oros. It will be 62 kilometers in length and 5 kilometers wide, with a capacity for 2,200,000,000 cubic meters of water. It has a dam 50 meters high, and its size is twice that of the largest in Egypt and 25 per cent greater than the Roosevelt, on the Salt River in the United States. * * *

Brazilian exports have increased from £40,000,000 in 1904 to £74,000,617 in 1912, and the first six months of 1913 showed an advance on the corresponding period of the previous year of nearly 5 per cent, and although a falling off occurred in the term from July to December, yet the increase over 1904 amounted to 59.6 per cent; this was greater than that obtained by the United Kingdom (57.7 per cent) or by the United States (57.5 per cent) in the same period of 10 years, taking imports and exports together, and it must be borne in mind that in Brazil there has been a steady excess of exports over imports during the whole of this period, whilst in the case of the United Kingdom in 1912 alone the imports exceeded exports by almost 50 per cent. The main decrease Brazil suffered in the last six months of 1913 was principally in two or three of the crops which have hitherto proved by far the most important items in the country's foreign export trade, but it is quite certain that in the course of another decade their vast preponderance over other products will be gone. * * *

The most striking statistics with regard to Brazilian progress during the past 20 years are afforded by the State of Sao Paulo. This truly American section of the Republic has doubled its population since 1894, and the capital of the State, which had 64,000 inhabitants in 1890, now boasts 460,000. In 1900 there were 21,656 dwelling houses within the city boundary, and at the end of 1913 the number had increased to 43,940. Building operations have not slackened in the least during the past 12 months and it is estimated that at the close of 1915 there will be 50,000 habitations in the urban district, with the population of half a million. This is, at the present time, undoubtedly the third largest Latin-American city. Besides the capital, there are 80 towns in the State with electric light and power installations. The total population is in the neighborhood of 3,000,000, and there are 57,000 estates, worth more than £70,000,000.

In writing of the railway developments of the country, he states:

In another 10 years at most every one of the isolated lines in Brazil will be linked up and railway transit assured between all the populated centers. The iron road is steadily penetrating into the interior, and all the new lines are running through splendid country, adapted to a great variety of cultures. In 1889 there were only 9,583 kilometers in operation, but at the present moment there are more than 23,000, with another 8,000 kilometers in construction and approved. * * *

It is, however, upon turning to water-borne traffic that we find figures which require no serious study to demonstrate the great advances made by Brazil since she threw off the yoke of the crown. Progress in this direction has been phenomenal, especially since 1904. In 1907 the total tonnage of foreign ships entering Brazilian ports amounted to 10,669,572, carried in 4,862 vessels. In 1912, 6,272 ships of 16,538,048 tons were berthed. One line alone of coasting steamers has 70 ships, with a burthen of 140,000

tons, valued at £2,340,000, and other important companies have between them 100 steamers totaling 70,000 tons. The new Amazon River Co. will have 12 distinct routes, covered by 62 steamers of 39,000 tons.

During 1912, 10,000,000 tons of national steamers entered Brazilian ports, the coast-wise traffic being entirely restricted to vessels flying the national flag. In 1905 the largest ship trading from Europe to Brazil was the *Atlantique*, of the Messageries Maritime Line, from Bordeaux, and her gross tonnage did not exceed 7,000. Now (1914) there are 30 approximating this burthen, 20 between 8,000 and 10,000 tons, 10 from 10,000 to 12,000 tons, and 13 up to 15,000 tons, and one of 18,000 tons.

The author enters into many details of the varied character of the agricultural possibilities of the country and shows the opportunities for investment in farming, stock raising, fruit growing, in the development of the iron and other mining resources, and altogether paints a most alluring picture of the future greatness and prosperity of the giant Republic of the southern continent.

Some impressions of Cuba, by Sydney Brooks, in the May number of the North American Review, deals chiefly with the natural resources of the Republic and their future development. Political conditions are lightly touched upon, and the relations of Cuba with the United States are analyzed from an Englishman's viewpoint. Of the city of Habana the author writes:

The first impression made on me by a recent trip to Cuba was the same as I received three years ago when I first visited the island. It was one of astonishment at finding both the capital and the country parts overrun with tourists. For three centuries at least, both to Europe and to America, the name of Habana has been a name of terror; and if the city is now on the way to becoming a recognized resort for pleasure seekers, if a few days in Habana or a sentimental visit to the battle fields round Santiago are to-day pretty regularly included in the return trip from Panama to New York, the Americans and their splendid achievement in stamping out yellow fever have to be thanked for it. * * * All over the island drainage systems, water supplies, and the whole machinery of public hygiene have been carefully studied. Habana nowadays is flushed as faultlessly as Paris or Berlin; and Cuba, a frostless land of perpetual June, where the thermometer rarely falls below 60° or rises above 90°, where the trade winds play with daily refreshment, and where the climate during the winter months is a great healer of bronchial troubles, is at last beginning to realize that its old and sinister reputation as a fever den was due to no natural causes, but simply to the folly and ignorance of man, and that its present position with the second lowest death rate in the world is much more representative of its real merits.

Of the wonderful natural resources of Cuba and the great field for future development he writes:

It is only within the last decade that Cuba has begun to realize either herself or her assets, to survey her natural resources, and to set about exploiting them in any systematic way. Even now barely one-twelfth of the island is under any sort of cultivation; many parts are almost as they were when Columbus first discovered it; in the eastern provinces, to leave the track of the Cuba Railroad is to find oneself as often as not in an uncleared jungle; fresh sources of agricultural, mineral, and industrial wealth are constantly being tapped; and, like the Western States of America 30 or 40 years ago, Cuba resembles a storehouse of unsuspected riches awaiting the men and the money to unlock it. Nothing, for instance, a few years ago would have seemed more

unlikely than that Cuba would one day be exporting over a million tons a year of the raw material of the American steel industry, or that a survey should show the island to contain deposits of 3,000,000,000 tons of iron ore. It is safe, indeed, to say that no one as yet has any precise idea of the wealth that Cuba is capable of producing. It is at once one of the most accessible spots on earth and one of the most neglected. It is situated on one of the most crowded and famous of trade routes—a route that will be more crowded than ever when the Panama Canal is open—and yet capital and modern science are only just beginning to explore its opportunities. There are probably very few territories of its size in the world so richly endowed with potential wealth, yet it is only on the threshold of its development, and its population numbers little more than two millions, or about a fifth of what the island could and should support in comfort.

Of the many changes that have taken place in Cuba none is of more importance than the opening up of the eastern districts. A dozen years ago Habana was better known abroad than Cuba; the ordinary visitor, whether on pleasure or business, rarely got farther east than Matanzas; there was practically no communication, except by sea, between Habana and Santiago; and the eastern end of the island lay not merely unimproved, but almost inaccessible. The enterprise of Sir William Van Horne in driving 600 miles of track lengthways through the middle of Cuba has changed all that, and to-day it is beginning to be realized that the economic future of the island may well prove to lie in its eastern provinces, and that the long-worked soil of the western parts may in the end be outranked by the virgin and more productive soil of the east. Even now it is possible for any well-organized concern to go into what is to-day an uncleared wilderness or forest and in five or six years to build up a profitable industry in sugar, timber, and fruit; and the Cuba Railroad, which has thus opened up a hitherto sealed region of extraordinary fertility, is something more than a common carrier. It is itself energetically engaged in the work of development which it has made possible. It is building ports and dredging harbors; it is a large landowner and hotel proprietor, and it has erected two of the most compact and efficient sugar mills on the island. All the Cuban railroads, indeed, strike one as extremely serviceable, well managed, and enterprising.

The author dwells in some detail on the opportunities for the investment of capital in the sugar industry, tobacco raising, fruit culture, etc., and concludes with some very complimentary comments relative to President Menocal and his cabinet, and the splendid work they are doing for their country.

Zur geschichte des Orinoco, by Dr. Siegfried Benignus, in the April 18, 1914, issue of *Süd-und Mittel-Amerika* (Berlin, W. 35 Lützowstrasse 102-104), is the first installment of what promises to be a thorough and most interesting study of the history of the Orinoco. In this contribution the author deals with the first period, giving an account of the discovery of the great river by Columbus on his third voyage, when on the night of the 3d of August, 1498, he found himself threatened by the great yellow floods of fresh water in the very mouth of the Orinoco. Interesting data, gathered from the letters of Columbus to his sovereigns in Spain, are given relative to his first landing on the mainland of Venezuela somewhere on the coast of the Gulf of Paria, perhaps about the present site of Puerto de Cristobal Colon, as well as accounts of his meeting with the natives, the discovery and naming of the Golfo de las Perlas, and the Golfo de la Ballena and other sections of the coast.

The subsequent explorations of Alonzo de Ojeda are also treated. Ojeda, who came from Cuenca, in New Castile, had accompanied Columbus on his second voyage, and after a quarrel with his leader in Santo Domingo had returned to Spain. With the assistance of the Bishop of Burgos, Ojeda received permission from the Crown to fit out an expedition for further exploration and conquest in the New World, and on May 20, 1499, he left the harbor of Santa Maria with four well-equipped vessels arriving, after a voyage of 24 days, on the coast of South America, in the vicinity of what was later called Surinam. Accompanying Ojeda were two notable characters, the Basque pilot, Juan de la Cosa, and the Florentine, Amerigo Vespucci. The former had considerable skill as a cartographer, and it is to him that we owe the first map of the New World (1500). The latter, who had been the agent for the Italian commercial house of Medici, in the city of Sevilla, Spain, had become interested in Columbus and his discoveries through his business relations with him, having sold to the great navigator the supplies for his first two expeditions. His interest thus led him to join Ojeda's expedition, little thinking at the time that his name would be immortalized in being given to the great continents of the Western Hemisphere, with the discovery of which he had so little to do.

Ojeda coasted along the northern shores of South America until he reached the island of Trinidad, where he learned from the friendly natives that Columbus had preceded him. Among other discoveries recorded by Ojeda was the Gulf of Chichivacoa, subsequently called Maracaibo. Several attempts to found colonies here and on the peninsula of Guajira failed, and eventually Ojeda died in poverty during the year 1515 in Santo Domingo.

Later periods of the history of the Orinoco are to be dealt with in future installments.

The city of New York is the title of a descriptive article in a recent issue of the Spanish edition of the **MONTHLY BULLETIN** of the Pan American Union, in which may be found some startling facts relative to the great American metropolis. Truly, as the article states:

New York is a city of contrasts; of things gigantic, pleasing, mystifying, inspiring, sorrowful. Amid the multitude on the streets the world's most distinguished men pass and repass unknown and unnoticed. The never-ending traffic is appalling and wearies the stranger's strength; it is a life of strenuous endeavor and activity and one that shortens the days; but at the same time it attracts and delights as does that of few other cities.

In explanation of the crowded and congested condition of traffic in the city the article continues:

Manhattan Island, the site upon which the city began to grow, is a strip of land $13\frac{1}{2}$ miles long, with an average width of but 2 miles. In 1614, when the Dutch first settled on the island, the land was rough and rocky, with ponds, marshes, and several swamps. To-day it is a honeycomb of human beings. People have gone deeper into

the ground and have builded to greater heights than in any other city in the world. The reasons for these unusual and congested conditions are many, but more prominent among them is the fact of the city's location on this narrow strip of land bounded on either side by a wide, swift river. The center of trade has persisted in clinging to the lower end of the island. As business has grown it has pushed up town, constantly forcing the residential districts farther northward—the direction of easiest expansion.

The actual area of the city is 327 square miles, its maximum width about 16 miles, and its length from north to south about twice its width. It has about 341 miles of water front, presenting a remarkably animated scene of commercial activity; for here are docked the vessels of all the nations of the earth contributing to a foreign commerce which in 1912 reached the stupendous figure of 27,222,903 tons, not including the enormous coastwise trade.

As population increased and business grew, tall buildings became a necessity because the water on either side prevented surface expansion. As business encroached on the northern section the skyscrapers were welcome as a relief and as a means of providing opportunity for growth. First these buildings came singly and then in groups, and they have increased in height until the latest giant, the Woolworth Building, stands preeminent among the world's office structures with a height of 750 feet, or 51 stories. Other buildings of unusual height are the Metropolitan Life, reaching the height of 693 feet; the Singer Building, 612 feet; the City Investment Building, 486 feet; the Bankers' Trust, 539 feet, etc.

Notwithstanding the enormous area provided by hundreds of these mammoth buildings, the city has expanded far beyond the rivers, by going both over and under them. Naturally, the first and easiest method of crossing the water was by means of boats and bridges, and as the first marvel in the latter method the Brooklyn Bridge stood for years unrivaled. This structure, 13 years in building, was opened in 1883 and cost over \$22,000,000. By 1910 there were four of these bridges connecting Manhattan with Long Island, costing from \$17,000,000 to \$26,000,000 each.

As business and population continued to increase the traffic problem grew more difficult. Bridge capacity was taxed and ferryboats could not handle the throngs of people, while underground railways became more and more important features. Some idea of the human traffic may be had from the statement that in 1911 passengers to the number of 345,903,962 were carried by bridges and river ferries, while the longitudinal subways, surface, and elevated roads carried a combined total of 578,154,088 persons. The growth has been so marvelous that the 300 miles of street railways are to be immediately increased to more than double their present mileage. When fully completed the cost of New York's subways will be not less than \$300,000,000, or within \$75,000,000 of the cost of the Panama Canal.

The estimated population of New York on January 1, 1913, was 5,173,064. Of this number about seven-eighths are native of the State; of the foreign born, Germany furnishes about one-fourth, Ireland about one-fifth, Russia one-eighth, Italy one-ninth, followed by England, Hungary, and Sweden in the order named. There are more Germans in New York than in any one city of Germany excepting only Berlin, while the city has more Irish than has Dublin.

Desolation Island, Strait of Magellan. In the April number of *The Geographical Journal* (London) may be found the following note which may be of much importance to steamship companies and navigators whose business lies in the far south:

Mr. W. S. Routledge, whose expedition to Easter Island, referred to in the *Journal* for May, 1913, having been delayed by unforeseen circumstances, writes from off the Chilean coast under date February 12, 1914, giving some particulars of an examination by him of one of the multitude of imperfectly known channels by which the land is broken in the region of the Strait of Magellan. The systematic surveys of the Chilean marine have done much to supply accurate knowledge of the labyrinth of islands and channels of this region, but they do not seem to have yet dealt with the little-known southern side of Desolation Island, south of the western entrance to the strait, to which Mr. Routledge's note refers. As indicated on the latest Admiralty chart, many of the channels which intersect the coast of the land complex bearing the name Desolation Island have never been examined, and it is quite probable that the supposed island (as has been found by the Chileans to be the case elsewhere) is really composed of a number of separate units. While the schooner-yacht *Mana* was detained by weather at Port Churruca on the north side of the island, Mr. Routledge examined the harbor by means of its motor launch, and at the head of the Lobos arm (shown on the Admiralty chart) found an Indian portage which had evidently been much used in the past. It led by easy gradients, by a track cut through the forest and crossed by transverse tree trunks at intervals of about 4 feet, across a narrow isthmus only 160 yards wide. Beyond was a sheltered cove with smooth shelving beach, from which a sheet of salt water extended to the southeast. This was traced down some 8 nautical miles, between snow-capped granite ranges 2,000 feet high, to a point where a second channel came in from the northeast, the width of the first averaging from half to three-fourths of a mile. A view from a hill at the junction showed the combined channel to be continued for 3 or 4 miles in the same direction, after which it entered a large sheet of water approximately at right angles. Beyond this water mountainous land was visible, which would seem to represent Redwood and adjacent islands, the fiord being presumably Dynevor Sound. Thus, apart from the narrow isthmus above referred to, Desolation Island will be here divided in two, and Mr. Routledge points out that a knowledge of the fiord at this point, almost connecting the Pacific Ocean with Magellan Strait, might be of much importance to the crew of a vessel lost to the south of Cape Pillar, as it would give easy access for boats to Port Churruca.

Süd- und Mittel- Amerika in its April 18, 1914, issue notes the death of one of the foremost authorities on the archaeology and ethnology of South America, Dr. Paul Ehrenreich, who succumbed to a sudden attack of heart disease on April 14, while engaged in his duties as professor in the University of Berlin.

Prof. Ehrenreich had spent the greater part of a lifetime in prosecuting his studies and explorations relative to the aborigines of South



BOOK NOTES

The Secret of the Pacific. A discussion of the origin of the early civilizations of America, etc. By C. Reginald Enoch, F. R. G. S. With 56 illustrations and 2 maps. New York, Charles Scribner's Sons. London, T. Fisher Unwin, 1912. 359 pages. Price, \$3.50.

The author has written much on America, having traveled extensively in the Andean region and in Mexico, about which he has given us other books. *The Secret of the Pacific* appears to be a well-prepared series of chapters on the particular subject that finds only scant mention in the more material and practical presentation of the contemporaneous America. What is the secret, he asks; whence and how did the early peoples of America reach the continents? Then he gives the various theories in answer, and goes on to describe the Cliff Dwellers, the Toltecs and Aztecs, the Mayas, Central American ruins, the Incas, and other inhabitants of South America. The last 7 of the 18 chapters are given to a discussion of the entire mysterious problem. The headings are: Comparisons and contradictions; Conflicting testimonies; An enigma of the ocean; The mysteries of the isles (in which the peoples of the islands of the Pacific are studied); The lost continent; World-wide affinities; A sublime cosmogony. About all that is known is comprised in these chapters, and most of the speculations, both scientific and fanciful, receive attention. The author's conclusions try to keep within conservative limits, and he therefore decides that the world is but one, and that the theory of a very early influence upon America from Asia is the more favorable of speculations. It is gratifying to note the liberal quotations from the articles on ancient ruins of the New World which appeared in the *BULLETIN OF THE PAN AMERICAN UNION*, and the author's acknowledgment, in a note under the table of contents, of the help given him by the *BULLETIN*. (A. H.)

The United States and Mexico, 1821-1848. A history of the relations between the two countries from the independence of Mexico to the close of the war with the United States. By George Lockhart Rives. Two volumes. New York, Charles Scribner's Sons, 1913. Octavo. Each volume about 725 pages; illustrated and with maps. Price of both volumes, \$8.

Mr. Rives writes with a clear understanding of the problem he sets before him. In the preface he states that "it is not doubtful that some lessons of extreme importance may be drawn from a study of our dealings with the nearest of our Latin American neighbors. We have not always been fortunate in our conduct toward the other nations of this hemisphere, and our failures have, as I think, been chiefly due to our ignorance." The history itself enters most thoroughly into a discussion of the details preceding the war, and discusses with frankness the understandings and misunderstandings that spread over the vast region north of the City of Mexico and west of the Mississippi River. The Republic of Texas receives treatment in a long chapter, followed by several others on allied events, and a systematic analysis of the war itself occupies much of the second volume. An alphabetical index of authors consulted is found at the end.

In Foreign Fields. By Joseph E. Wing. Sketches of travel in South America and western Europe. Chicago, The Breeder's Gazette. 12°. 550 pages, illustrated.

The author was commissioned by the United States Government to study comparative wool-production costs, in connection with the Tariff Board, and he made a thorough trip through the sheep areas of Argentina. His technical knowledge of the subject, and his long connection with the Breeder's Gazette, gives him the right to speak with authority on his particular subject. In addition, however, to the features of

wool culture introduced—his technical report is not given in this book—he has given his readers many delightful chapters on life in South America, and on the interesting phases of social life with which it was his pleasure to come in contact. As in most cases where travelers from the United States have proper opportunity to see the real South America, he was charmed by his experiences, and his notes are crowded with incidents, appreciation of which he puts into the words of the text. The book is a wonderfully vivid picture of present-day life and industry in the new land of Argentina.

The Lowery Collection. A descriptive list of maps of the Spanish Possessions within the present limits of the United States, 1502-1820. By Woodbury Lowery, edited with notes by Philip Lee Phillips, F. R. G. S., Chief Division of Maps and Charts. Government Printing Office, Washington, 1912. (L. C. card, 12-35005.) For sale by the Superintendent of Documents, Government Printing Office, Washington, D. C. Price \$1.

Mr. Woodbury Lowery, who died in Sicily, April 11, 1906, left in his will a large collection of manuscripts, maps, notes, etc., to the Library of Congress. A monograph by the author describes 750 maps, of which 306 are in this Lowery collection, the others being mentioned as associated in the author's mind with them. The Lowery collection of maps was begun for a serious study in early history, to be used in connection with the unfinished work entitled "Spanish Settlements within the Present Limits of the United States." For this reason they are practically all historical, and for this reason also Mr. Philip Lee Phillips has arranged them in chronological order. The title as selected is a "Descriptive List of Maps of the Spanish Possessions Within the Present Limits of the United States, 1502-1820." Mr. Lowery was one of the many scholars of the United States distinctly honored abroad for the thoroughness with which he attacked his work and for his profound knowledge of all things American. He was a Harvard man of the class of 1875, and from shortly after graduation, until the time of his death, he made it his life work to collect these maps and the manuscripts or notes thereon associated with them. Mr. Phillips in editing this collection has done a distinct service to American letters, to the Library of Congress, and to all those interested in the tremendous world movement which began at the discovery of America.

There is an author's list, a title list, and an index, and in the latter many references can be found to South America, although the collection itself was made with particular reference to North America. Certainly all persons who wish to go to the original source of any cartographic knowledge will welcome this publication of Mr. Phillips as a treasure beyond price.

Scientific Tariff Making. By Henry Tarleton Wills. A history of the movement to create a tariff commission. Blanchard Press, 426 Twenty-fifth Street, New York. 332 pages.

As the author is the secretary of the National Tariff Commission Association, he speaks with authority on the facts of the movement. He gives also comparative studies on similar commissions in foreign countries.

Pan American Questions. Means looking to the mutual developments of American Republics. Issued by order of the honorable minister, Dr. Pedro de Toledo (service of information of the department of agriculture, industry, and commerce), Rio de Janeiro, Brazil, 1913.

A pamphlet issued officially by the Brazilian ministry of agriculture and commerce, quoting opinions in advocacy of an increased intercourse between the United States and Brazil, basing upon these a plea for a better means of communication from north to south.

Annuaire de Brésil Économique, 1913. Rio de Janeiro (*Le Brésil Économique, 104 Rue Ouvidor*). Edition with 24 geographic charts and 14 diagrams in color. 958 pages, large octavo. Price, 25 francs (about \$5).

A glance at the index shows that this semiofficial publication is one of the most exhaustive and complete studies of Brazil which has ever been offered to the public.

The customhouse regulations are given; the laws on patents; on manufacturing and trade-marks; the system of consular invoices to be followed; statistical tables; statements of agriculture, commerce, and industry; a study of the rubber problem; of the railways and ports of the Republic; the character of the investments of foreign capital in the country; and (in English) a complete statement of the tariff regulations. An important feature is the sections given to a presentation of the economic condition of each State of Brazil. In fact, no point of interest to the student, the financier, or the business man is omitted from this volume. Already it is frequently consulted by the staff of the Pan American Union for some recent data of Brazil not always available elsewhere in the Library.

Exportation of the Chief Articles of Brazilian Production, or Brazil's Foreign Trade in the years 1910, 1911, and 1912. Issued by order of Dr. Pedro de Toledo, minister of agriculture, industry, and commerce.

Another pamphlet full of valuable statistical data on the industries and commerce of Brazil, and given the official approval of the Government.

The Fishes of the Stanford Expedition to Brazil. By Edwin Chapin Starks, assistant professor of zoology. With 15 plates.

One of those technical reports of definite interest to the scientist, which show how much good work is constantly in progress in many parts of the continent of South America.

The Two Hague Conferences. By Joseph H. Choate. Princeton University Press, Princeton. 1913. Duodecimo 109 pages.

Mr. Choate was first delegate in the representation of the United States at the Second Hague Peace Conference, and has here presented his analysis of those meetings at The Hague, as delivered in lectures at Princeton University. There is an extensive introduction by Dr. James Brown Scott, of the Carnegie Endowment for International Peace.

Fourth American Peace Congress. St. Louis, 1913. Edited by Walter B. Stevens, executive secretary of the congress. (Copies can be obtained from the Business Men's League, St. Louis, Missouri, for \$1, postage paid.)

That the peace congresses are a success in their efforts to arouse public opinion to the practical advantages of peace as opposed to the disastrous consequences of war needs no better proof than the publication of this volume. This is the transactions of the fourth meeting, and all through it are notes of the influences at work to strengthen the movement.

Printers' Marks in the Fifteenth Century. By Horace Townsend. Printed for private circulation by the Bartlett-Orr Press, New York.

A delicate pamphlet, calling attention to the older fashion of printers' marks, and advocating the revival of the same fashion for present use.

The library of the Pan American Union has recently received a number of technical publications on subjects relating to Latin America, and a list is hereby given of those not otherwise mentioned. Expedition of the California Academy of Sciences to the Galapagos Islands, 1905-06; notes on the lichens of the islands, by Alban Stewart, instructor in botany in the University of Wisconsin. From the results of the Peruvian expedition of 1912, under the auspices of Yale University and the National Geographic Society, come the following: Geologic Sketch of Titicaca Island, by Herbert E. Gregory. Lepidoptera, by Harrison G. Dyar. Batrachians and Reptiles, by Leonhard Stejneger. Orthoptera (addenda to the Acrididae—short-horned locusts), by Lawrence Bruner. New Peruvian Mammals, by Wilfred H. Osgood. Report on the Gold, Diamond, and Forest Industries of British Guiana, 1912-13; issued by the Institute of Mines and Forests of British Guiana, Georgetown, Demerara; price, 36 cents.

SUBJECT MATTER OF CONSULAR REPORTS

REPORTS RECEIVED UP TO MAY 20, 1914.¹

Title.	Date.	Author.
ARGENTINA.		
Crushing machinery (little market).....	1914. Mar. 11	William Dawson, Jr., consul, Rosario.
Cotton clothing—women's and children's.....	Mar. 14	Do.
Copy of El Diario Judicial (news and trade paper).....	Mar. 17	R. M. Bartleman, consul general, Buenos Aires.
Exporters of hides and skins; list of Argentine packing houses.....	Mar. 28	Do.
Coffin hardware.....	do.....	William Dawson, Jr., consul, Rosario.
List of manufacturers and dealers in brushes and brooms.....	Mar. 30	R. M. Bartleman, consul general, Buenos Aires.
Petroleum products, imports 1913.....	Apr. 9	William Dawson, Jr., consul, Rosario.
Spouts for loading grain from elevators into cars (no market)	Apr. 13	Do.
Men's clothing and furnishings.....	do.....	Do.
Desiccated eggs (no market); list of bakers.....	Apr. 14	Do.
Collar and saddle pads; list of harness dealers.....	do.....	Do.
Number of flour mills; output; number of employees; list of mills.	do.....	Do.
BRAZIL.		
Eggs, imports for 1910, 1911, and 1912.....	Mar. 25	Albro L. Burnell, vice consul general in charge, Rio de Janeiro.
Material used in the construction of warehouses in Santos.....	Mar. 28	Do.
Importation of coal into Brazil, 1911-12; prices.....	Mar. 31	Do.
Electric signs.....	Apr. 1	Do.
Laundries.....	Apr. 4	Do.
Market for American fruits; duties.....	do.....	Do.
Cattle-raising and meat-packing companies.....	do.....	Do.
Grocery-importing houses.....	do.....	Do.
General merchandise.....	Apr. 7	Do.
Wall paper.....	do.....	Do.
Duties on cleaning and polishing liquids, and varnish.....	do.....	Do.
Saddle pads.....	do.....	Do.
Automatic sprinklers (little market).....	do.....	Do.
Crude rubber exports from January to March, 1914.....	Apr. 8	Geo. H. Pickerel, consul, Para.
Crude rubber exports for month of March, 1914	do.....	Do.
Advertising.....	Apr. 13	Albro L. Burnell, vice consul general in charge, Rio de Janeiro.
Clothing.....	do.....	Do.
Coffee mills.....	Apr. 20	Do.
CHILE.		
Tanning.....	Mar. 24	Alfred A. Winslow, consul, Valparaiso.
Travel conditions in Chile.....	do.....	Do.
Stoves.....	Mar. 27	Do.
Wall paper; imports 1911-12; duties.....	do.....	Do.
Fruits.....	Mar. 30	Do.
Dairy farms.....	do.....	Do.
Exposition of American goods.....	Apr. 9	Do.
Sales; duties.....	do.....	Do.
COLOMBIA.		
Ornamental wrought iron and other structural steel fittings (little used).	Apr. 11	Thaddeus A. Thomson, United States minister, Bogota.
Leather.....	Apr. 17	Do.
Stoves.....	Apr. 21	Isaac A. Manning, consul, Barranquilla.
COSTA RICA.		
Executive decree regarding acquisition of petroleum lands.....	Apr. 28	Samuel T. Lee, consul, San Jose.
CUBA.		
List of importers of motor cycles.....	Apr. 10	Dean R. Wood, consular agent, Nuevitas.
List of importers in city of Nuevitas, Cuba.....	Apr. 17	Do.
Steam pumps, power pumps, and oil engines.....	Apr. 20	Do.

¹ This does not represent a complete list of the reports made by the consular officers in Latin America, but merely those that are supplied to the Pan American Union as likely to be of service to this organization.

Reports received up to May 20, 1914—Continued,

Title.	Date.	Author.
DOMINICAN REPUBLIC.		
List of dealers in shoes.....	1914. Mar. 18	H. Watson, consular agent, San Pedro de Macoris.
Imports of pine lumber in district.....	Mar. 26	Do.
Shoes.....	Apr. 2	Charles H. Albrecht, vice and deputy consul general, Santo Domingo.
Filters.....	do.....	Do.
Clocks.....	do.....	Do.
Carpet sweepers, hand power (little market).....	do.....	Do.
Shoos.....	Apr. 15	Do.
Electric paste (rat and roach exterminator); list of druggists.....	do.....	Do.
List of merchants.....	Apr. 18	H. Watson, consular agent, San Pedro de Macoris.
Furniture (dealers).....	Apr. 23	Charles H. Albrecht, vice and deputy consul general, Santo Domingo.
HAITI.		
Moving pictures; duty on films.....	Apr. 28	L. W. Livingston, consul, Cape Haitien.
HONDURAS.		
Rubber goods; list of general importers	Apr. 21	David J. D. Myers, consul, Puerto Cortes.
MEXICO.		
Lumber.....	Apr. 1	Richard M. Stadden, vice consul, Manzanillo.
Chemical specialties.....	do.....	Clarence Miller, consul, Tam- pico.
Watches.....	do.....	Do.
Shoes.....	Apr. 3	Philip C. Hanna, consul, Monterey.
Officials in charge of education.....	Apr. 4	C. R. Guyant, vice consul, Ensenada.
Automobiles.....	Apr. 10	Gaston Schmutz, consul, Aguascalientes.
Annual report for 1913.....	(Un- dated.)	Thos. D. Edwards, consul, Juarez.
Do.....	Apr. 11	Frederick Simpich, vice con- sul, Nogales.
Corrections made in annual report for 1913.....	Apr. 13	William P. Blocker, vice con- sul, Ciudad Porfirio Diaz.
Mazatlan notes.....	do.....	William E. Alger, consul, Mazatlan.
Dry goods and general merchandise.....	Apr. 15	Marion Letcher, consul, Chi- huahua.
Automobiles.....	Apr. 18	Wm. W. Canada, consul, Vera Cruz.
Commerce and industries of Durango consular district for year ending Dec. 31, 1913.	May 1	T. C. Hamm, consul, Du- rango.
PANAMA.		
Iron beds.....	Apr. 6	James C. Kellogg, consul, Colon.
Automobiles.....	do.....	Do.
Annual trade report for 1913.....	Apr. 25	Do.
PERU.		
Drilling machinery; list of mining companies.....	Apr. 3	William W. Handley, consul general, Callao.
URUGUAY.		
Bank statement for month of Feb., 1914.....	Mar. 23	Ralph J. Totten, consul, Montevideo.
Trees, plants, and fruit culture in Uruguay; list of nursery- men and dealers.	Mar. 27	Do.
VENEZUELA.		
Lumber imports.....	Apr. 2	Thomas W. Voetter, consul, La Guaira.
Magnesite in island of Margarita	do.....	Do.
Center tables (little market); list of furniture dealers	Apr. 4	Do.
Fire insurance rates	do.....	Do.
Rock-crushing machinery	do.....	Do.
Tanning materials produced; list of tanners	Apr. 6	Do.
Copyrights.....	do.....	Do.
Shirts, belts, and garters (men's).....	do.....	Do.
Wall paper; list of dealers.....	do.....	Do.
Dried egg product.....	Apr. 13	Do.
List of hardware dealers (Carmas).....	Apr. 14	Do.
List of dealers of musical instruments.....	do.....	Do.
Soda fountains (possible classification).....	Apr. 21	Do.
Cottonseed oil (duty).....	Apr. 22	Do.

ARGENTINE REPUBLIC

During one week in March of the present year 1,450 IMMIGRANTS arrived at Buenos Aires from various European countries, mainly from Italy and Spain. Nearly all of them were immediately sent out to the harvest fields of maize, which crop was at its height about the date mentioned; labor has been in great demand in agricultural sections and wages very high, but not sufficiently attractive to draw laborers from the United States. The many steamship companies operating between Argentina and Europe and the extremely cheap steerage passage rate causes heavy labor travel to Argentina, especially during harvest seasons.—A RECORD TRANSACTION in live stock was made recently when Sr. Pedro Estanguet sold 8,200 cattle at the rate of \$175 each, making a total of \$1,435,000 for the whole number. The latter amount reduced to United States money would be \$1,391,950. The cattle were raised in the Province of Cordoba and were sold to the La Blanca Freezing Co., of Buenos Aires.—The POTATO CROP in Mar del Plata and Balcarce districts is reported to be one of the best ever grown in that section of the Republic.—The manager of one of the great department stores in Buenos Aires, on being asked his opinion of the general BUSINESS OUTLOOK, said that last year his company sold goods to the value of \$45,000,000; that they expected to exceed that amount during the present year by at least \$10,000,000; and that the company's new building to be completed in September next should leave no doubt in the minds of people as to the prosperity of his company. The new store building referred to will be one of the finest in the capital, and will give the establishment a total floor space of 100,000 square meters.—A sample shipment of GRAPES and peaches from Mendoza recently reached New York. Some of the fruit was received in bad condition, but with careful selection and packing and the use of refrigerating compartments on steamers, it is thought that shipments of this nature could be handled with safety. Grapes and fruits of the finest quality, appearance, and flavor are produced in great abundance in the neighborhood of Mendoza, and if transportation difficulties can be overcome, it is certain that these fruits would meet with a ready sale in the New York markets.—The agricultural and stock FAIR recently held at Deseado, territory of Santa Cruz, southern part of Argentina, was a great success. Late years have demonstrated in a practical manner the great productiveness and fertility of the southern territories of the Republic. The territory of

Chubut is noted for its petroleum, that of Neuquen for cereals, fruits, and live stock, especially sheep, and Rio Negro is acknowledged to be one of the most fertile of the territories of the nation. Persons familiar with the trend of Argentine immigration predict that, with improved transportation facilities, Southern Argentina will receive an increased number of European immigrants from year to year, as that part of the country becomes better known abroad. The picturesque cordillera country, comprising the region in and about Lake Nahuelhuapi, is being rendered more accessible to tourists and settlers. A plan is under way looking to the establishment of a fluvial route from Patagones and Viedma to Bariloche on Lake Nahuelhuapi. The Limay River is reported to be navigable for small steam craft from the Gulf of San Matias to a point near Sañico and Plimay. A messenger service from Buenos Aires to Lake Nahuelhuapi by train and automobile has been established, the distance being covered over one of the routes in forty-eight hours.—The second section of the TUBE TRAMWAY at Buenos Aires, extending from Plaza Once to Rio de Janeiro Street, was opened to public traffic on April 1 last. The time consumed in making the trip through both sections of the tunnel to Plaza de Mayo is 15 minutes. During the first four months the underground tramway has been in operation about 8,000,000 passengers were carried without the occurrence of an accident.—The production of HIDES in the Argentine Republic in 1913 was 5,304,178, of which number 4,304,178 were exported, the remainder being utilized in the country.



The Bolivian Legation in Washington and the Bolivian consulate in New York have kindly furnished the Monthly Bulletin with the following interesting data: The EXPORTS from the port of San Francisco to Bolivia in 1913 consisted of 324,724 packages of merchandise weighing 11,802,553 kilos, valued at \$381,048.06. These shipments were made up of the following articles: Flour \$271,491.55; lumber \$42,196.46; machinery \$22,945.43; canned goods \$16,045.70; cement \$792, and miscellaneous articles \$27,376.92. In March, 1914 there were shipped from the port of New York to Bolivia 4,844 packages of merchandise weighing 421,255 kilos valued at \$117,996.16 consisting of hardware, cotton goods, machinery, drugs, groceries, petroleum, and sundry articles. Nearly all of this merchandise reached Bolivia via the ports of Mollendo, Peru, and Antofagasta

and Arica, Chile.—A MOTOR OMNIBUS service is to be established between the cities of Potosi and Sucre. Hitherto communication between these points has been by mule-drawn coaches. These stage coaches are now to be replaced by four six-cylinder electrically lighted and started busses which will cover the distance of 100 miles in 12 hours. The altitude of the route is about 7,000 feet, except where the road crosses the crest of the Andes about 5 kilometers from Potosi, where an elevation of some 14,000 feet is reached. Three of the busses are equipped to carry 11 passengers each and a limited quantity of freight, while the fourth is handsomely fitted up for 7 passengers. Potosi is the center of one of the richest mining regions in the world, and Sucre is the official capital of the Republic.—The COMMERCIAL CONVENTION signed at Santiago de Chile on August 6, 1912, by the plenipotentiaries of Bolivia and Chile, has been approved by the congresses of the two countries and is now in force. Bolivia has also made a commercial treaty with Japan.—Careful geologic investigations of the eastern slope of the Bolivian Andes confirm the claim that a PETROLEUM belt exists along the entire range of these mountains from Yacuiba to the Madre de Dios River. The Espejos petroleum spring, 12 leagues from Santa Cruz, is a fair sample of the quality of petroleum encountered in the belt referred to. Oozings taken from the surface flow of this spring, according to recent analyses made in London, contain 78.2 per cent of kerosene, 17.5 of lubricating oil, and 4.3 per cent of coke. No shafts have been sunk in this neighborhood, but the indications would seem to augur that gushers may be found by boring to the proper depths. Up to the present time the Espejos spring remains unexploited.—The RUBBER producing regions of the Republic of Bolivia are the National Territory of Colonias, the departments of La Paz, Beni, and Santa Cruz. During the five years from 1908 to 1912, inclusive, the value of rubber produced in Bolivia amounted to £7,625,371 (\$36,983,049), nearly all of which was exported via the Amazon and Paraguay Rivers.—An ore SMELTER is being erected at Quiaca, Bolivia, by Fhiel & Co.—The Andacaba and Cuchu MINES are being developed by an English company.—A law has been promulgated imposing a tax of 3 per cent on transfers of REAL PROPERTY for a valuable consideration.—The WATER supply of the city of Potosi is obtained from artificial lakes constructed by the Spaniards. The canals leading from these lakes having become unserviceable because of leaks and destruction by the elements, distribution pipes have been ordered to take the place of the canals.—Jose Arturo Ergueta, a Bolivian aviator, has made proposals to the Government for the establishment of a military AVIATION SCHOOL in the Republic.



BRAZIL

The FIRST NATIONAL CONGRESS OF HISTORY will be held in Rio de Janeiro from September 7 to 16, 1914, under the auspices of the Brazilian Historic and Geographic Institute. The President, Vice President, and Minister of Foreign Relations of Brazil will be honorary presidents of the Congress. Dr. B. F. Ramirez Galvao is executive chairman, and Max Fleiuss, general secretary of the Congress.—According to recent statistics the PROPERTY OF FOREIGNERS residing in the State of Sao Paulo was valued at 448,500 contos (\$244,881,000), distributed as follows: Italian, 161,000 contos (\$87,906,000); Portuguese 151,000 (\$82,446,000); German 62,000 (\$33,852,000); French 11,000 (\$6,006,000), and other nationalities, 63,500 contos (\$34,671,000).—The Secretary of the Navy of the Government of Brazil has requested, through the American ambassador at Rio de Janeiro, the services of two American naval officers to teach tactics and strategy in the Brazilian naval college, and a naval instructor to teach the preparation of vessels for battle, their operation during the engagement, etc. The Brazilian Government also proposes to bring from France a number of marine officers of that country to act as instructors in the naval school.—According to press announcements a CUSTOMS CONVENTION has been signed between Brazil and Uruguay.—The President of the Republic recently participated in the inauguration of a POLICE HOSPITAL in the city of Rio de Janeiro. The building is a well-lighted and ventilated structure, and is equipped with modern apparatus and appliances.—A Portuguese company proposes to establish a new line of STEAMERS between Portugal and Brazil. The plan, as formulated, provides for at least three trips monthly between the ports of the two countries.—In 1913 the city of Rio de Janeiro consumed 209,813 head of CATTLE, 34,264 hogs, 11,263 calves, and 18,228 sheep.—Dr. Fontoura Xavier has been appointed MINISTER of the Government of Brazil in London.—Ten naval officers were recently authorized to matriculate in the military AVIATION SCHOOL at Rio de Janeiro. This school has just received two hydroplanes from the United States. A North American aviator will give a series of practical demonstration with these machines.—Upon the recommendation of the consul of Brazil in New York, the Brazilian Government will appoint commercial agents in New York and Chicago. These agents propose to make an active commercial propaganda on coffee.—On September 7, 1914, a STOCK FAIR will be held in Rio de Janeiro. Fine stock

from different parts of the Republic, and especially from Sao Paulo, will be exhibited at this fair.—From January to April of the present year 18,543 IMMIGRANTS disembarked at the port of Santos. During April and May it is calculated that 4,228 more will arrive.—The naval department of the Government of Brazil has established a naval TELEGRAPH SCHOOL in Rio de Janeiro.—A proposal has been made to the municipal board of the city of Rio de Janeiro soliciting its cooperation in the erection of a STATUE in the federal capital to the Brazilian poet, Luis del Fino.—Six Brazilian young ladies have received SCHOLARSHIPS for a course of instruction in the normal school for girls in Montevideo. Three of these scholarships are from the department of public instruction of Uruguay, and three from the State of Rio Grande do Sul.—In considering the world's supply of cotton and the interest which is now being directed to sections where cotton is grown on trees, it may be news to some readers to know that Brazil has two species of COTTON-BEARING trees that merit attention. The first tree, known as the barragunda, has a barrel-shaped trunk and grows to from 25 to 35 feet in height; the second, or imbirussa, which produces a kind of brownish cotton, is regarded as a finer grade. Both of these species are indigenous to Brazil and grow wild, especially in Minas, Bahia, and other sections.



CHILE

The CONGRESS OF INDUSTRY and commerce, which met in Santiago, Chile, on May 21, 1914, was attended by a large number of the representative Chilean manufacturers, merchants, and business men. The congress was divided into the following sections: Agriculture, mining, and manufacturing; commerce and transportation; education and legislation, and social economy.—The Huanillo MINES and smelter at Cobija and vicinity in the department of Tocopilla have been sold to an English company for £165,000 (\$800,250). The new purchasers propose to develop the mines on an extensive scale.—The Government of Chile has placed in London a LOAN of £2,000,000 (\$9,700,000), issuing treasury certificates bearing 5 per cent annual interest for the amount of the same. The loan is payable in 18 months from February 4, 1914.—Statistics compiled by the Bureau of Mines of the Republic of Chile show that the total value of the MINERAL PRODUCTS of the country in 1912 was 372,662,774 Chilean gold pesos (\$136,021,912), as compared

with 178,768,170 Chilean gold pesos (\$66,247,382) in 1902, or an increase during the last 10 years of more than 200 per cent. According to the *Revista Comercial*, the Department of Industry of the Government of Chile proposes to begin an active campaign with the object of making known abroad the mineral resources of the Republic, the districts in which ores are to be found, the production of mines, and numerous other details concerning the mining and metallurgical business of the country.—During the present year the Government of Chile has decided to send to the United States and Europe nine AGRONOMISTS, chosen by competitive examination from the agricultural schools of the Republic, to complete their studies abroad.—According to telegraphic dispatches preliminary steps have been taken looking to the establishment of an industrial CHILEAN-ARGENTINE COLLEGE, the object of which will be to educate students for positions in the industrial establishments of the two countries.—The Chilean consul in Montevideo has reported to his government that the Republic of Uruguay is an excellent field for the sale of CHILEAN LUMBER and cereals, provided an adequate reduction in freight rates from Chilean to Uruguayan ports can be obtained.—The Southern LONGITUDINAL RAILWAY has issued an illustrated pamphlet containing detailed data concerning freight and passenger transportation between Valparaiso and Copiapo. The pamphlet contains maps, pictures, and other valuable information.—A Chilean MARITIME LEAGUE has been organized for the protection of the merchant marine, the encouragement of naval instruction in the country, the increase of the navy, the establishment of homes for seamen, the regulation of fisheries, the improvement of ports, the promotion of rudimentary naval instruction in schools, and the establishment at dangerous ports on the coast of houses of refuge for passengers and crews of shipwrecked vessels.—There are 35 GERMAN colleges, numerous churches, and a number of hospitals in Chile. Germans are in control of the electric light and power plants at Santiago and Valparaiso, operate many flour mills and several breweries. The Chilean army has German instructors, sends a number of Chilean officers yearly to Germany for military instruction, and imports from Germany nearly all of the armament and equipment of the Chilean army.—The chain of lighthouses in operation in the STRAIT OF MAGELLAN has recently been perfected to such an extent as to make the navigation of the strait by night entirely feasible. Heretofore vessels have only navigated the strait during the day. The new lighting system will be a great saver of time and money to shipping.—News advices from Santiago report that Wiegand & Co. have asked the government for a concession to operate freight and PASSENGER MOTOR CARS across the Andes from Los Andes to Mendoza, the distance

being 230 kilometers. They propose to operate 12 freight motor cars capable of hauling 8,000 kilos each, and at a rate of only about one-half that charged by the railway now operating between the two places. The trans-Andine Railway is subsidized by both Chile and Argentina, and the new company asks a guarantee of 7 per cent on the capital they propose to invest, which is believed will be about \$750,000.



COLOMBIA

A MATCH FACTORY, equipped with the most modern machinery and appliances, will soon commence to operate at Manizales.—Marcel Berthaul, professor of AGRONOMY, who contracted with the minister of Colombia in Paris as instructor in the university of Narino, has arrived at Pasto.—Negotiations for the founding of a BANK with French capital in the city of Bucamaranga are nearly completed.—The Government of Cundinamarca has contracted with H. Charton, proprietor of vineyards in the municipality of Tocaima, to establish an AGRICULTURAL INSTITUTE on his property. The school will begin operations with twelve pupils selected from the municipality.—The STATUE of the celebrated Colombian scholar and philologist, Rufino José Cuervo, which was made in France by order of the Colombian Congress, is to be erected in San Carlos Plaza in Bogota.—In the latter part of April of the present year there was inaugurated at Medellin a much needed AUTOBUS service.—The Bank of Colombia at Bogota has opened a section for EXPORTS OF COLOMBIAN PRODUCTS, and has prescribed conditions exceedingly favorable to exporters. For the present the business will be confined to shipments of coffee.—The REVENUES of the Atlantic Department in 1913 amounted to \$198,018.29 gold. Barranquilla, the capital of the Department, with a population of 48,907 inhabitants, paid departmental and municipal taxes during the year referred to, \$310,355.14, or at the rate of \$6.346 per inhabitant per annum. The remaining 19 districts with a population of 65,980, paid \$43,829.36, or at the rate of \$0.666 per inhabitant per annum.—Demographic statistics of Bogota in 1913 show 3,514 deaths, 3,136 births, and 607 marriages.—The EXPORTS of the Department of Antioquia in 1913 were gold and silver bullion valued at \$3,191,620; 174,027 sacks of coffee at \$20 each, \$3,480,540; 62,846 skins at \$7 each, \$439,922; and 44,800 dozen hats at \$16 per dozen, \$716,800, or a total value of \$7,828,832.—At a meeting of the board of agriculturists in Bogota in April last, a proposal was

approved for founding an AGRICULTURAL BANK with a capital of not less than \$300,000 in \$50 gold bonds. This bank will have a department for the consignment of products, and will make loans only to its shareholders and consignees.—The Society of San Bernardo has been organized in Bogota for the purpose of opening SCHOOLS FOR THE POOR and the establishment of workmen's quarters in the upper part of the city.—The National Government has founded the ORDER OF SAN MATEO for the purpose of decorating persons who render distinguished services to the country.—The Colombian society of engineers has approved a recommendation for holding a mathematics and engineering CONGRESS of the Great Colombia on March 29, 1915, in which Venezuelan, Colombian, and Ecuadorean engineers will participate, as well as engineers of all the South American Republics who desire to take part. The support of the Government for the undertaking is solicited.—The Superior Board of Health has ordered the necessary apparatus and supplies abroad to found in Bogota a BACTERIOLOGIC AND CHEMICAL LABORATORY to be operated exclusively under its direction.—A MUTUAL BANK (Banco de la Mutualidad), with a capital of \$100,000 gold, under the management of Victor Manuel Ogliastrí, has been founded in Bucaramanga.—The Department of Finance has established a section, under a law of Congress, whose duty it is to supply data concerning the CLASSIFICATION OF ARTICLES of the customs tariff.



President Alfredo González, who was inaugurated on May 8, has selected the following cabinet: Secretary of Foreign Affairs, Sr. Don Manuel Castro Quesada; Secretary of Interior and Judicial Police, Sr. Don Juan Rafael Arias; Secretary of Finance and Commerce, Sr. Don Mariano Guardia Carazo; Secretary of Fomento and Public Works, Sr. Don Alberto Echandi; Secretary of War, Sr. Don Federico A. Tinoco; and Secretary of Public Instruction, Sr. Don Luis Felipe Gonzalez (assistant secretary).—The right to fish for TORTOISES (Tortugas) in the Atlantic zone of the Republic of Costa Rica has been leased to Maduro & Sons for a period of five years at an annual rental of 5,000 colones (\$2,325). This is the third consecutive five-year lease that the firm referred to has made with the Costarican Government for tortoise fishing in the waters of the Atlantic Ocean bordering on Costa Rica. The company is well sup-

plied with equipment and gasoline launches. Under the terms of the lease some of these launches are to be used in carrying the mails between different points on the coast.—The city of San Jose receives its WATER supply from the Tiribi River, distant two and one-half miles from the Federal Capital. The water at present is brought to the distributing point in open aqueducts, but a plan is under consideration looking to the piping of the waters of the river from the intake direct to the consumer so as to minimize the chances of pollution while being conveyed from the river to the city.—In April last a free NIGHT SCHOOL for workmen was established in the city of San Jose. The course embraces instruction in English, French, drawing, mathematics, Spanish grammar, history, morals, and civics.—Plans are under consideration for the erection by the Costarican Government of a number of WIRELESS telegraph stations. One of these will probably be located at San Jose, another at Puntarenas, and a third at Golfo Dulce. The installation at San Jose is planned to be powerful enough to communicate with the islands of the Caribbean Sea, Mexico, New Orleans, Colon, Panama, and the Colombian and Venezuelan coasts. The other stations are to be less powerful. Jose Ripples, who has been negotiating with the Government for the Marconi interests, estimates that the Government would be reimbursed within a period of about four years for apparatus and installation from the receipts.—Negotiations are under way with a group of foreign capitalists for the construction of a PORT at Tortuguero, the canalization of the lagoons in the neighborhood of that place, and the building of a railway, including branches, through the Parismina District, via Sarapaqui and San Carlos, to the Federal Capital. The capitalists referred to desire to exploit the railway for a period of 50 years, request a guarantee of 6 per cent on the capital invested, and a grant of land for the establishment of the towns necessary along the line of the railway. If satisfactory arrangements are made with the Government, the capitalists propose to invest several million dollars in the enterprise.—Dr. Jose Croux e Illa, a skilled physician and surgeon and professor of medicine in the University of Barcelona, has been given a chair in the School of MEDICINE of the Republic of Costa Rica at San Jose.—A public LIBRARY has been organized at Puntarenas. One of the principal founders of the library is Adan Peralta F.—The Government of Spain has invited the Government of Costa Rica to send a number of Costarican youth to Madrid to study WIRELESS telegraphy.—Sergio Ramirez Rojas has petitioned the Government for a concession to establish an ELECTRIC light and power plant at Tacares for industrial purposes. One of the uses of the plant will be to furnish power with which to operate a sugar cane mill at Santa Rosa, Province of Alajuela.



CUBA

The approximate value of the IMPORTS AND EXPORTS of the Republic of Cuba in 1913, including imports of coin, are as follows: Imports, \$143,758,736, as compared with \$125,902,241 in 1912; exports, \$164,823,059, as compared with \$172,978,438 in 1912. The imports from the United States in 1913 were \$75,967,525, as compared with \$64,631,862 in 1912; the exports to the United States in 1913 were \$131,783,619, as compared with \$145,185,933 in 1912. The imports from the United Kingdom in 1913 were \$16,071,787, as compared with \$15,397,649. The exports to the United Kingdom in 1913 were \$18,427,163, as compared with \$11,446,336 in 1912. The imports from Germany in 1913, \$11,193,108, as compared with \$8,431,201 in 1912. The exports to Germany in 1913 were \$4,707,548, as compared with \$6,199,172 in 1912. The imports of coin in 1913 were \$3,694,576, as compared with \$2,700,296 in 1912.—President Menocal has authorized Francisco Itueta and Edgardo Bogatta to install in the city of Habana two WIRELESS telegraph stations to be used in giving theoretical and practical instruction in wireless telegraphy. Before the stations can be used they must be inspected and accepted by the Government.—On May 20 last the twelfth ANNIVERSARY of the founding of the Republic of Cuba was celebrated throughout the island with appropriate ceremonies. One of the most impressive features of the celebrations was the large military parade of cavalry and infantry in Habana in which about 4,000 soldiers participated.—The Department of Public Works has awarded the contract for the paving of Vives, Galiano, Belascoain, Monte, and Reina Streets in the city of Habana to Torrance and Portal, who agree to do the work at the rate of \$6.56 per meter for the small-size blocks and \$4 for the granite curbstones. The contract covers the laying of some 80,000 lineal meters of PAVEMENT, and 20,000 lineal meters of curbing. The total cost will be approximately \$600,000. If the contract work is not completed within 100 days, the contractors are subject to a penalty of \$1,000 a day for each day's delay beyond that time.—The Albisu THEATER in Habana is to be rebuilt at an approximate cost of \$100,000. According to the plans the new building will be fireproof and modern in every particular.—The Government of Cuba has been invited by that of Spain to participate in the EXPOSITION of fine arts to be held in Madrid in October, 1914.—It is reported that the Camaguey WATERWORKS, consisting of an aqueduct, reservoir, tanks, and

a pumping station, will be completed and ready for use early in 1915.—According to press reports the United Fruit Company has established a new LINE OF STEAMERS between Boston and Habana. The 5,000-ton vessels *Carillo*, *Tirives*, and *Sixola* are to be employed in this service. These steamers will also call at Port Limon, and it is said arrangements are under way for including the Isle of Pines in the ports of call. Two of the horses which won thousand dollar prizes at the recent STOCK FAIR in Habana have been purchased by Sir William Van Horne for his stock ranch at Victoria. The price paid is said to exceed \$10,000.

DOMINICAN REPUBLIC

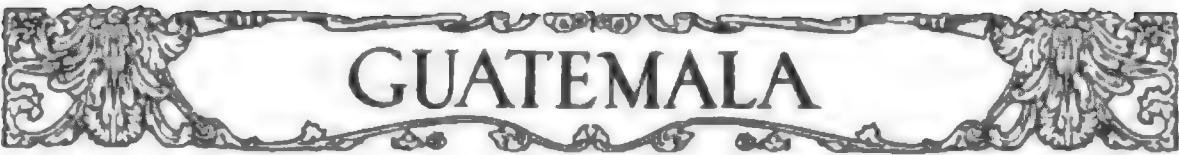
According to the "Listin Diario," a daily newspaper of the city of Santo Domingo, a number of important PUBLIC WORKS are to be completed in the Republic during the present year. Among these is the construction of a public highway for vehicles from the city of Santo Domingo, in the Province of Santo Domingo, to Cibao. It is predicted that this much-needed highway is the precursor of a railway which will unite the Federal capital with Cibao. Such a railway would be a most valuable factor and a real asset in developing the great agricultural resources of the Province of Santo Domingo, inasmuch as it would put into easy and rapid communication with the metropolis and chief port of the country and with the outside world, a number of communities and towns situated in the fertile valleys and plains of one of the richest agricultural and stock raising sections of the Republic, to say nothing of the forestal and mineral wealth of the region referred to. The aqueduct of the city of Santo Domingo is another one of the great works that is expected to be terminated during the present year. The State, as well as the municipality of Santo Domingo, have obligated themselves to do all within their power to complete this work in 1914.—The revenue derived from the tax on LIQUOR in 1913 was \$214,388.54, as compared with \$187,127.96 in 1912, and \$219,833.29 in 1911. In 1913 there were 8,868 gallons of alcohol denatured in the Dominican Republic, as compared with 12,943 in 1912. There were no exports of aguardiente from the Dominican Republic in 1913, and only 22.8 gallons, valued at \$18.24, were exported in 1912. The exports of molasses in 1913 were 2,897 gallons, as compared with 2,021 gallons in 1912. The total production of molasses in the Republic in 1913 is estimated at 5,000,000 gallons.—It having been impossible

to place in circulation the issue of postage STAMPS and postal cards commemorative of the birth of the Dominican patriot, Juan Pablo Duarte, at the time referred to in executive decrees of April 30 and July 14, 1913, an executive decree issued under date of April 4, 1914, provides that said issue shall circulate during the period of three months from April 15 to July 15, 1914.—The greatest historical treasure that the Dominican Republic claims is, without doubt, the remains of COLUMBUS. That these should be preserved, venerated, and their existence made known to foreigners, says the "Listin Diario," is the duty of all Dominicans and especially of those connected with the Government. With this end in view the department of state of the Dominican Republic has suggested that a short, concise pamphlet be published in several languages concerning the ashes of the illustrious navigator, and that these pamphlets be circulated abroad through the diplomatic and consular agencies of the Government, and that copies be given to foreigners who visit Santo Domingo. Another suggestion is that the department of state reprint the two notable books on the subject written by the Dominican citizen, Sr. Emiliano Tejera, the editions of which are now exhausted. Many foreigners and students who visit the Dominican Republic vainly endeavor to acquire these books in the bookstores of the country, and nearly all foreigners who come to Santo Domingo are deeply interested in the subject.



A German contracting company has submitted to the department of public works of the Government of Ecuador a detailed bid for the construction of a RAILWAY from the port of Esmeraldas to Quito. This bid has been referred to the Government railway commission for consideration. A railway from Esmeraldas to the interior of the Republic is badly needed, and after it is built and opened to traffic would be a powerful factor in developing a large section of rich agricultural country which has remained backward up to the present time on account of the lack of quick and adequate transportation facilities. The commerce of the port of Esmeraldas in vegetable ivory alone is 6,000,000 kilos of tagua or vegetable ivory per annum, and this product produces export taxes annually amounting to 1,000,000 sures (\$487,000). Valuable shipments of tobacco, rubber, cacao, gold, and cattle are exported from Esmeraldas, and exports

of all these products would be greatly increased by the construction and operation of a railway into the interior of the country. A steam or electric railway from the city of Esmeraldas to Coquito Beach, a distance of 4 kilometers, is one of the most urgent needs of the municipality, since this would facilitate the handling of the commerce of the port and the loading and unloading of vessels. A pier could easily be built from the beach to deep water, and deep-draft vessels could be loaded and unloaded at this pier without resorting to the use of lighters. The carrying out of the improvements contemplated would make Esmeraldas one of the busiest and important ports of the Republic for freight and passenger traffic. Esmeraldas also needs a wireless telegraph station, since this is the nearest port in Ecuador to the Canal Zone. A plan for supplying the city with waterworks is under way and a project for the canalization of the Esmeraldas River is being considered. The Ecuador Land Co., an English corporation, owns land in and to the north of the Province of Esmeraldas aggregating about 1,000,000 hectares, and it is thought that better transportation facilities would induce this company to undertake the development of its property on a large scale, thereby giving employment to hundreds of persons.—The Ambato-Curaray RAILWAY has increased its force of laborers to 1,600 men. Grading has been completed for a distance of 18 kilometers, 6 additional kilometers have been opened to public traffic, and 5 kilometers of track superstructure have been finished. Mr. Charles H. Moore, an American engineer, is in charge of construction work.—The municipal BUDGET of the city of Quito for 1914 amounts to 385,750.56 sures (\$187,860.52).—The department of public instruction has provided 3,000 copies of the CONSTITUTION of Ecuador for distribution among the public schools of the Republic.—The TRAMWAY in the city of Quito, work on which was temporarily suspended a few months ago, is to be extended to Egido, or military training grounds, in the suburbs of the capital.—The University of Guayaquil has added a course of PHARMACY to its curriculum.—The Chilean-Ecuadorian Society has contracted with Antonio Gil for 5,000 head of CATTLE (yearlings) to be delivered at the port of Villamil, Isabela Island, for shipment to Chile. The contract price is £4 per yearling weighing not less than 400 kilos.—The Government of Ecuador has accepted the invitation of the Argentine Government to participate in the Second International CONGRESS of Agricultural Defense which will meet in Buenos Aires in 1916. Ecuador will also take part in the International Congress of Tropical Agriculture, which will be held in London in June, 1914.



GUATEMALA

There are six BANKS in the capital of Guatemala, with branches or agencies in the principal departments of the Republic. Among these may be mentioned the Agricultural and Mortgage Bank, with a capital of 12,000,000 pesos (silver peso = \$0.434); the American Bank, with a capital of 5,000,000 pesos; the Occidental Bank, with a capital of 2,000,000 pesos; and the Columbian Bank, with a capital of 1,776,000 pesos. The city of Guatemala also has a number of important banking houses, such, for instance, as Schulbach, Dauch & Co., Schwartz & Co., Clermont & Co., Rosenthal & Sons, and a number of others.—The Cantel COTTON CLOTH FACTORY, established in 1885 at Cantel, department of Quezaltenango, has a capital of \$600,000 gold. The cost of the buildings was \$125,000 gold, and the machinery is valued at \$475,000 gold. The factory produces white and colored cotton fabrics and employs about 500 persons. About 10 per cent of the cotton used in the factory is raised in the country, and the remainder is imported from the United States. The average daily production of the factory is some 300 bolts of cotton goods of 24 yards each. The machinery installed is sufficient to turn out 400 bolts daily. The fabrics manufactured are of excellent quality. The price per bolt varies from \$2 to \$3.—There are 502 miles of RAILWAYS in operation in Guatemala, as follows: The Guatemalan Railway, including the 25-mile branch of the Quirigua, 220 miles; the Occidental Railroad, 54 miles; the Ocos, 25; the Verapaz, 29; the Pan American, 20; the Suburban, 9; and the Decauville Railway, 4 miles. The Guatemalan, the Central, the Occidental, and the Ocos railways are under the management of the International Railroads of Central America. In 1897 there were 298 miles of railways in operation in the Republic, the increase from that date to the present time being 41 per cent.—Lake Atitlan, in the Republic of Guatemala, one of the largest and most beautiful lakes of Central America, has been stocked by the Government of Guatemala with choice species of edible fish. The native fish of this lake are small and are not of the best quality. As early as 1905 the Guatemalan fish commission took steps to populate the lake with the best edible fish obtainable in the streams of the country. The waters of Lake Atitlan are warm at the surface and cold in the lower depths, and it has been observed that fish liberated in the lake seek water of the temperature in which they have been accustomed to live. In stocking the lake two systems were employed, namely, that of liberating the fish on placing them in the lake, and that of holding them in captivity in artificially con-

structed breeding grounds. Both methods brought excellent results. Lake Atitlan is surrounded by volcanic mountains and is famous for its picturesque scenery, said not to be excelled by that of any mountain lake in the world.—The celebrated Russian ARTIST, Spiro Rossilimo, decorated by the Czar with the order of San Andres and one time director of the School of Fine Arts at Moscow, has come to Guatemala with the object of making the federal capital his permanent place of abode.—The board of agriculture of Quezaltenango has taken steps toward the establishment of an AGRICULTURAL SCHOOL in the vicinity of the city of Quezaltenango.



HAITI

On April 21 of the present year the inauguration at Port au Prince of a primary NORMAL SCHOOL for girls was effected under the patronage of the minister of public instruction of the Haytian Government. The president of the University of Haiti, the inspector and assistant inspectors of schools, high officials of the department of public instruction, and a number of distinguished persons from the Federal capital were present and participated in the ceremonies. Miss Maradon, a talented and experienced teacher, was appointed directress of the school.—In accordance with the suggestion of General Ducasse a SPORTING SOCIETY of the national guard has been organized under the direction of General Celestin.—Charles Gentil, Lynceo Duroseau and Ed. Dauphim have been appointed by the President of the Republic as a commission in charge of the issuance and delivery of vouchers or vales representing 20 per cent of the amount of salaries, pensions, subventions, indemnities, etc., in accordance with an executive decree of March 23 last.—Public bids have been requested for the construction of a building for the PROFESSIONAL SCHOOL FOR BOYS, to be located on the grounds of the old arsenal, opposite Magasin de l'Etat Street, and Descaunes Street in the city of Port au Prince. The building will front on Magasin de l'Etat Street and will have a length of 120 feet. The cost of the edifice is not to exceed \$23,659, gold.—On May 2, 1914, a new WEEKLY PAPER, entitled "La Plume," devoted to politics and literature, was issued under the management of Charles Moravia.—The IMPORT AND EXPORT business in March last was very active at the ports of Petit Goave and Miragoane. From the first of these ports products were exported to the value of \$44,960, American gold, while the imports of merchandise were valued at

23,191 gourdes, paper, and 57,647 gourdes, gold. The imports through the port of Miragoane during the month referred to amounted to 4,388.64 gourdes and \$2,538, while the value of the exports were 72 gourdes and \$12,178.14. The principal products exported from Petit Goaves were ordinary coffee, 1,322,414 pounds; selected coffee, 127,164 pounds; cacao, 77,467 pounds; guayacan, 140,000 pounds, and copper, 1,517 pounds.—In "Le Moniteur," the official newspaper of Haiti, under date of April 29 last, the program of the National AGRICULTURAL CELEBRATION, which took place on May 1, 1914, was published. The President and distinguished Government officials took part in the ceremonies.—On April 23, 1914, the regular sessions of the twenty-eighth CONGRESS of the Republic of Haiti were inaugurated. The Chief Executive delivered an eloquent discourse in answer to the speech of the President of the National Assembly.



HONDURAS

A recent law of the Congress of Honduras prescribes that managers, owners, or directors of factories, or industrial works or shops shall establish on their premises and maintain at their own cost PRIMARY SCHOOLS, properly equipped and under the direction of competent teachers, in case there are no public schools within a radius of 2 kilometers from their establishments, and provided the factories or shops referred to employ 100 or more workmen. Where there are a number of factories or shops grouped together, even though the workmen employed in each one of them are less than 100, a school shall be established in the most central place of the group, and shall be maintained by all of the industrial establishments in proportion to their importance. The managers, owners, or directors comprised within the scope of the law in question shall grant two hours daily, which shall not be included in the working hours of the factory, to such employees who are under 14 years of age and who have received no schooling whatever, to attend the factory or public school. The instruction given in these schools shall comprise reading, writing, Spanish grammar, arithmetic, and elementary civics. Children who can read and write may be employed in the factory a year younger than that set forth in the law governing the employment of women and children and which fixes the age at which children may be employed in factories. The schools comprised under the present law

must be established within three months from March 2, 1914. Full reports of the establishment, maintenance, and operation of these schools must be made at stated intervals to the Minister of Public Instruction by the departmental directors of primary instruction.—

The city of Santa Barbara has been authorized by the Federal Congress to hold the Santa Barbara FAIR from the 1st to the 8th of December of each year.—The Congress of Honduras has contributed the sum of 25,000 pesos (\$10,850) toward the furnishing of a supply of potable WATER to the city of Santa Rosa de Copan.—

Rafael López Padilla has contracted for the construction of a branch of the National RAILWAY from a point on the main line between El Pinto and Villanueva station to Santiago.—William J. Streich has leased 5,000 hectares of GOVERNMENT LAND in the department of Cortes.—J. Rössner & Co., of Amapala, has been authorized to establish a GASEOUS WATER factory at Aramecina, and to import, free of duty, the machinery, supplies, etc., necessary for the equipment of the same.—At the request of Samuel E. Warren, of El Porvenir, department of Atlantida, the Congress of Honduras has modified the concession granted him under decree No. 43 of March 2, 1911, so as to permit the free importation of all kinds of agricultural and sugar machinery, etc. The concession is for 25 years from January 24, 1911, and is for the cultivation of SUGAR CANE and the manufacture of sugar on a large scale. After two years the concessionaire is obligated to produce at least 900 quintals of sugar per month.—

Decree No. 53 of the Congress of Honduras provides for the importation of FENCE WIRE and staples, free of Federal and municipal duties, for a period of 10 years from February 21, 1914.—

L. Cooper & Bros. have been authorized to establish a DRY DOCK on the Bahia Islands, with permission to import free of duty for a period of five years such material as nails, iron bars, chains, rivets, anchors, etc., used at the dry dock in the building or repair of vessels.—

The MAHOGANY Syndicate (Ltd.), of London, has been granted a concession to cut cedar and mahogany timber on Government lands comprised between the Aguan River and tributaries, departments of Yoro, Colon, and Olancho, and the Patuca River and tributaries, with the exception of lands already covered by timber concessions. The concessionaires agree to pay to the Government \$8.40 American gold for each mahogany or cedar tree cut. The company has the privilege of importing free of duty such machinery, tools, etc., as may be required in cutting, preparing, and hauling the logs referred to.—The Congress of Honduras has decreed that October 12 of each year shall be celebrated as a NATIONAL HOLIDAY in honor of the discovery of America by Columbus.

MEXICO

COMMERCE FOR 1913.

The total foreign trade of Mexico for the fiscal year ending June 30, 1913, amounted to 496,177,955.93 pesos gold, an increase of 15,526,515.32 pesos over 480,651,440.61 pesos, the figures for the preceding year. The value of the imports was 195,772,338.77 pesos, compared with 182,662,311.20 pesos, an increase of 13,110,027.57 pesos. The value of the exports was 300,405,617.16 pesos, as against 297,989,129.41 pesos, a gain of 2,416,487.75 pesos.

Valuing the Mexican gold peso at 50 cents United States, the imports for 1912-13 amounted to \$97,886,169.38, as compared with \$91,331,155.60, an increase of \$6,555,013.78. The exports for 1912-13 on the same basis amounted to \$150,202,808.58, as compared with \$148,994,564.70, a gain of \$1,208,243.88, or an increase in the total trade of \$7,763,257.66.

The following tables show the imports and exports of Mexico for the last three fiscal years:

IMPORTS.

Principal countries.	1910-11	1911-12	1912-13
United States.....	\$56,573,492	\$49,212,836	\$48,643,778
United Kingdom.....	11,984,485	10,753,154	12,950,047
Germany.....	12,781,095	11,922,609	12,610,385
France.....	9,336,642	7,809,138	9,168,978
Spain.....	2,639,288	2,950,217	5,265,321
India.....	1,049,411	971,490	1,430,519
Belgium.....	2,155,837	1,639,630	1,401,718
Austria-Hungary.....	1,063,390	1,045,399	950,580
Switzerland.....	725,788	782,278	946,063
Italy.....	1,188,452	974,731	942,081
Argentina.....	358,978	409,891	611,244
Japan.....	230,461	279,700	448,684
Sweden.....	188,863	363,143	375,712
Netherlands.....	262,993	272,762	334,746
Norway.....	200,198	217,631	254,525
Russia.....	120,752	65,678	203,287
China.....	213,355	207,819	194,970
Chile.....	281,580	204,337	168,827
Canada.....	394,861	482,280	151,723

EXPORTS.

Principal countries.	1910-11	1911-12	1912-13
United States.....	\$113,167,055	\$112,729,956	\$116,017,854
United Kingdom.....	17,941,176	20,099,328	15,573,552
Germany.....	4,354,171	5,158,365	8,219,009
France.....	4,654,939	4,164,911	3,575,509
Belgium.....	3,689,792	3,177,322	2,575,624
Spain.....	792,150	1,180,298	1,091,413
Cuba.....	1,102,185	968,713	863,939
Canada.....	917,862	678,345	743,768
British Honduras.....	412,159	412,457	588,685
Guatemala.....	413,677	398,585	413,155



NICARAGUA

Diego M. Chamorro, Minister of Foreign Relations of the Government of Nicaragua, has submitted to the Federal Congress an extensive REPORT, consisting of 93 printed pages, and covering in detail the principal events which have occurred in the department of foreign relations from the time he took the oath of office until December 31, 1913. According to this report all claims for damages suffered during the presidency of Zelaya, Madriz, and the present administration have been arranged in a definite and satisfactory manner. The Government has endeavored in every way possible to strengthen the existing friendly relations with the Central American Republics. The Fourth Central American Conference established foreign relation committees attached to the respective departments in each of the Republics, and the Fifth conference provided for the appointment of one consul to represent the five Republics in each of the cities of Bremen, Vigo, Genoa, Liverpool, and Havre, Nicaragua having the appointment of the consul at the latter place. The Minister regrets that the Sixth congress, held at Tegucigalpa, Honduras, did not adopt the free-trade agreement proposed by Nicaragua between the five Republics. The right of Costa Rica to celebrate the Chamorro-Weitzel treaty, the text of which has not been given to the public, is sustained. Regarding the boundary dispute with Honduras the Minister says that in spite of the controversy Nicaragua and Honduras have remained on the same footing of friendship as that existing before the agitation of the question began. The report touches upon the policy of the United States with respect to the Central American Republics, and refers to the declaration of ex-Secretary of State Philander C. Knox, in the Nicaraguan Assembly, and of President Wilson in Mobile, in which they manifest that the United States Government does not desire one inch more of territory south of the Rio Grande, and that the only object of its policy is the maintenance of republican institutions in this hemisphere. The report publishes all the documents relating to the attempted extradition of ex-President Zelaya from the United States, deals extensively with the relations of the Government with the Holy See, and maintains that freedom of religion in the Republic is a necessity. The report states that 90 claims of British subjects calling for £80,000 were settled for £15,000. Referring to education, the Minister says that the schools have been provided with materials and educational accessories purchased abroad, and that the Girl's Normal School and the Boy's Pedagogical Institute have been founded. During the last years of the Zelaya administration there were 276 schools

as compared with 414 at the present time. The attendance during the Zelaya administration was 25,000, as compared with 35,000 at the present time. The appropriations for public instruction during the last year of the Zelaya administration was 880,000 pesos, as compared with 3,000,000 pesos in 1912 under the Diaz administration. In the city of Leon there are now 69 centers of learning, as compared with 35 during the previous administration, and 208 teachers as compared with 102 in the former administration. The number of pupils receiving instruction in the city of Leon during the Diaz administration was 5,200 as compared with 2,789 during the previous administration. The report estimates that 31 per cent of the school population of the country now receives public instruction.—A bill has been introduced into the Assembly to amend the AGRARIAN LAW, fixing the following prices for the denouncement of national lands: \$0.40 per hectare if the lands are savannahs or hills covered with natural herbage suitable for grazing cattle; \$0.60 per hectare if level or hilly lands suitable for agriculture, with or without ordinary forest growth, and \$1 per hectare for agricultural land with natural irrigation or facilities for obtaining same. When the land has forests of timber suitable for construction or cabinet work, or for producing dyes, rubber, liquid amber, etc., there shall be an additional charge of \$1.25 per hectare. The prices referred to do not include those which may be paid during the course of the denouncement or the deposits that may be made according to the value of the land to be denounced.



Actual work on the construction of the CHIRQUI RAILWAY was begun by the arrival of the advance guard of laborers at David, who are building a hospital and executive offices. Materials of all kinds are being shipped from Panama to David and the latter city will soon be the headquarters of a large working force. The contractors, profiting by the lesson taught by hospital facilities and other sanitary precautions in the Canal Zone, will first look after health conditions of the laborers and construction work is likely to proceed quite rapidly. Arrangements have been made for securing from the forests of Chiriqui many thousands of ties needed in building the road.—During the month of March 3,764 PERSONS arrived in the Republic with the intention of making permanent homes there. Of transient travel 3,211 tourists visited the canal during the same month; in February the number of visitors was

given at 4,052. In March 102 vessels arrived at Colon and 18 at Balboa.—Preliminary steps are being taken in the city of David for the installation of an ELECTRIC LIGHT system, and owing to the topography of the country this enterprise could be easily consummated. President Porras, according to the news report, is deeply interested in improving and developing the section about David, and the advent of electricity would be a most important step in that direction.—The French Government has made arrangements for the construction of a LEGATION BUILDING in Panama City, the contract having been given to Canavaggio Brothers. The site selected is at present marked by the ruins of Chiriqui. The new edifice will cost about \$60,000 and will be one of the most beautiful buildings belonging to foreign nations.—MOTOR BOATING on Gatun Lake is another attraction that has been added to the pleasure of the tourist in Panama. A 40-foot boat owned by the Panama Railroad is operated on the lake, and for a small sum visitors may enjoy a cool three-hour trip over the former valley of the Chagres.—According to the report of the American consul at Colon there seems to be a tendency of the Panama Government to discontinue the granting of large TRACTS OF LAND to few individuals, which policy will doubtless increase the number of bona-fide settlers.—The board of directors of the PANAMA EXPOSITION, which will open its doors on January 1, 1915, advises all persons interested in placing exhibits there to make reservation at an early date and thus secure the most prominent locations. This board is planning the erection of a special pavilion for housing the products of foreign factories, and there seems to be an excellent opportunity for displaying samples of United States manufactured goods. Newspaper reports indicate that great progress is being made on the exposition grounds and buildings.—The Hamburg-American Steamship Line will erect a \$50,000 OFFICE BUILDING at Cristobal, the contract for the same having been given to an American firm, and it is probable that most if not all of the materials needed will be purchased in the United States.



PARAGUAY

According to newspaper reports PASTORAL INDUSTRIES in Paraguay started by the Farquhar interests are already showing good results, and large numbers of cattle and farm products are being shipped by rail directly from Asuncion to the markets of Buenos Aires. So far no diseases have appeared among the various herds, which are largely "Zebu," crossed with the native Paraguayan cattle.—

A PAPER MILL is soon to be established at Concepcion, if present plans mature. Such a factory will have a virgin field and its products should find a ready market throughout the Republic; large quantities of paper are imported each year from foreign countries.—The extension of the branch of the Paraguay Central RAILWAY from Borja to Iguazu is progressing, the rail head having reached kilometer 46, and trains will soon cover the entire distance. At present they run only as far as kilometer 31.—Messrs. Hvoslef & Dahm are reported by the daily press as about to establish a MODERN DAIRY in Asuncion. The latest machinery and appliances have been secured from Norway, and the enterprise is likely to meet with success from the beginning of its operations.—A new SCHOOL OF AGRICULTURE is to be established in Paraguay; funds have been provided and the city of Ypacarai is to have the institution. The Paraguay papers speak of the school as a very important factor in the economic development of the country; as students are instructed and graduated they will be assigned to various sections and thereby carry instruction into the actual fields of labor.—A Government decree authorizing the opening of Barranca Mercedes as a port for the EXPORTATION of Paraguayan products was put into effect. This place is on the River Paraguay and it is believed that many products will pass through and be facilitated en route to foreign markets.—El Diario, a leading newspaper of Asuncion, published under date of February 9 a statement showing the commercial and INDUSTRIAL PROGRESS of the Republic. Business in all lines has been very satisfactory, industries have increased, especially those of agriculture and stock raising, and the foreign commerce was considerably greater than during the previous year.—The press of Paraguay is devoting considerable space to the proposed establishment in Concepcion of a school of ARTS AND CRAFTS. A number of leading citizens are actively interested in the matter, as it is thought that such an institution will be a vast benefit to the community. Poor children and orphans will be taught many needful and gainful occupations, which in turn will be useful to the development of the country as well as relieving poverty by providing work.



A CHANGE OF SCHEDULE on the Southern Railway of Peru is proving very convenient for the large number of passengers handled by this road. Better and faster trains are operated between Mollendo and Puno, which make it possible to reach La Paz, Bolivia, more quickly than heretofore. An express train between Puno and Cuzco,

with connections from Mollendo, makes it possible to leave Juliaca, the junction point, and reach Cuzco the same day.—Mr. J. Peet, an expert on sugar production, visited the numerous SUGAR ESTATES of the Republic and made an interesting report of his observations. He says, among other things, that "the growth is luxuriant, as can be easily imagined with an average of 40 tons of cane per acre as the usual return, while 60 and even 70 tons are not uncommon. In other sugar-growing countries of the world 25 tons is considered an excellent average."—La Prensa, of Lima, recently published a report on RUBBER, made by a German house in Hamburg, which shows the Peruvian product in demand. The Peruvian output for 1913 is given at 9,620 tons, which shows a considerable increase over that shipped during the previous year.—It is reported that the Peruvian STEAMSHIP LINE, locally known as the Compania de Vapores, is planning to operate its ships not only as far as Panama, as at present, but the service will be extended to the western coast of Central America, Mexico, and possibly farther north.—The specialist from the United States who has been investigating the possibilities of saving the low-grade SILVER-ORE TAILINGS that are scattered over the workings in the Cerro de Pasco section believes that much valuable ore may be saved. The tailings run about 15 ounces per ton, and by the establishment of a cyanide plant this ore could be treated at a profit of from \$2 to \$2.50 per ton. This rate would make something like a total profit of \$30,000,000 on the quantity available, a fact that shows the magnitude of the work that may sooner or later be started.—Work on the Santa Ana RAILWAY, from Cuzco northward, is progressing rapidly, and within a few weeks it is believed that the ascent of El Areo, one of the extremely difficult sections of the road, will be an accomplished fact. The grade there averages about 3 per cent.—In repairing the monastery of Santo Domingo in Cuzco workmen discovered beautiful specimens of INCA WORKMANSHIP. This work has remained hid behind numerous coats of plastering, and it is probable that no living person knew of the magnificent designs that have been concealed for many years. The monastery is on the site of the ancient Temple of the Sun, and is one of the places that travelers always visit when sojourning in Cuzco.



According to the press of Salvador a RADIUM mine has been discovered at Cerro Pelon, department of Sensuntepeque, by an English mining engineer and mineralogist. Some years ago this engineer made detailed investigations of the mineral resources

of the department referred to, and took with him to London for assay samples of the Cerro Pelon ores. An assay of the samples showed them to be of a peculiar and complex nature, and while they were of great interest to geologists who saw them, they were not considered of any commercial importance. About a year ago the English engineer in question was examining his collection of samples, and his attention was particularly called to the one marked "Cerro Pelon, Sensuntepeque," and he decided to have it analyzed a second time. Several analyses were made of the sample, and all of them showed that the substance appeared to be rich in radium. Realizing that he was about to discover a body of ore of immense value, he decided to send two experienced engineers to make detailed investigations of the land from which the sample was taken, and at the same time to organize a company for the exploitation of the deposit. These engineers are now making detailed investigations of the land from which the sample was obtained, and have drilled about 60 meters into Cerro Pelon. Reports from the investigating engineers are very encouraging, and it is understood that they are soon to issue a formal statement confirming the discovery of radium at Cerro Pelon. The land where the mine is located belongs to the municipality of Sensuntepeque, which, according to the laws of the Republic, gives the ownership of the mine to the municipality. Proposals have been made to the municipal council to lease the land for a period of 30 years upon the basis of 10 per cent of the profits which are estimated at 40,000 pesos (\$17,360) per annum, the municipality to have exclusive use of such thermal waters as may be encountered in exploiting the mine. Great interest is being manifested in Salvador in the discovery, and considerable prospecting is being done in the vicinity of the mine and in other parts of the department of Sensuntepeque in the hope of finding additional valuable deposits of radium or other ores.—According to press reports the department of foreign relations of the Government of Salvador intends to terminate the TREATY with Italy made in 1860; that with Spain in 1865; that with Venezuela in 1883; and that made with Ecuador in 1890.—In the city of San Salvador in 1913 there were 2,596 BIRTHS, of which 1,331 were males and 1,265 females. The deaths during the same year numbered 1,889, of which 1,042 were males and 847 females. The marriages during the year numbered 155.—A BRONZE BUST has been unveiled in Santa Ana in honor of Father Moraga, founder of the orphans asylum of that place.—In 1913 the NATIONAL PRINTING OFFICE of the Republic of Salvador printed 3,022 books, pamphlets, etc., the total editions of which numbered 13,663,040 copies. The funds available for the printing office from all sources during the year referred to amounted

to 149,128 pesos, while the expenditures aggregated 115,037 pesos, leaving a balance on hand at the beginning of 1914 of 34,092 pesos.—The town of Cuyultitan has recently been furnished with an abundant supply of potable WATER.—The SCHOOL OF GRAPHIC ARTS in the city of San Salvador, has recently established sections of painting, lithographing, stenography and typewriting, and expects to have a printery and bindery in operation in the near future. This school has more than 500 matriculates, and maintains day and night classes.—A school for female NURSES has been founded in the city of San Salvador.



URUGUAY

The President of the Republic recently submitted a message to Congress relative to the organization of a military AVIATION SCHOOL and the purchase of aeroplanes for experimental purposes.

—Señora Teresa Santos de Bosch has been designated by the President of Uruguay to attend the International Conference relative to the blind, which will be held in London in June of the present year. The conference will discuss many important phases of life of the blind, and it is hoped that much good may be accomplished by this international meeting, which will be attended by delegates from various parts of the world.—La Propaganda, one of the leading agricultural periodicals of Montevideo, devotes considerable space in a recent number to the part Uruguay is to play in the Panama-Pacific Exposition at San Francisco. THE EXHIBITS that Uruguay will send are discussed, the space of the various departments of agriculture, horticulture, and other exhibits are given in detail; all of which indicates that the Republic is gathering an exhibition that will doubtless attract wide and favorable attention.—The American consul in Montevideo furnishes the recently adjusted prices of TREES AND SHRUBS, which are fixed semiannually by the Department of Industry, which supplies large quantities to growers in various sections of Uruguay. Pine trees two years old are quoted at \$4.14 per 100 trees; eucalyptus trees are the same price; oak one year old are worth \$2.69 per 100; poplar, of which there are three varieties, are worth \$2.69 to \$6.20 per 100. The central and southern portion of the Republic being almost treeless, it is necessary to plant trees for shade as well as for commercial purposes, and the Government through its nursery supplies many varieties of trees and shrubs for such purposes. There are also a number of private nurseries, which are well equipped and carry a large assortment of seeds, flowers, trees, and shrubs. It is

estimated that within the last few years 17,000,000 forest trees have been planted in Uruguay, and fruit culture is rapidly advancing by the numerous orchards that are started yearly.—The BANCO DE SEGUROS del Estado, a department of the Government, issued a statement for 1913, which shows the premiums received to be \$662,459, or nearly double that of the previous year. Twenty-nine general agencies were established in interior cities and towns; surplus and reserve on hand at end of year was \$307,633.—Recent press reports give the city of Montevideo a POPULATION of 377,994, as against 362,824 in 1913. In January of the present year there were 862 births, 180 marriages, and 579 deaths registered in that city.—Five hundred Russian families, according to a news report from Montevideo, are likely to emigrate to the departments of Artigas and Paysandu, negotiations for which are now in progress. This addition to the population of these two sections of Uruguay would bring hardy and prosperous laboring people whose coming should be very important to commercial and industrial interests.



VENEZUELA

The following is the personnel of the cabinet of Provisional President, General Bustillos: Minister of Interior, Sr. Don César Zumeta; Minister of Foreign Affairs, Sr. Don M. Díaz Rodríguez; Minister of Finance and Public Credit, Sr. Dr. Román Cárdenas; Minister of War and Navy, Gen. M. C. Castro Zavala; Minister of Fomento, Sr. Don Pedro-Emilio Coll; Minister of Public Works, Sr. Dr. Luis Vélez; Minister of Public Instruction, Sr. Dr. Felipe Guevara Rojas; Governor of the Federal District, Gen. Juan C. Gómez.—Dr. G. Delgado Palacios, of Caracas, has been appointed Venezuelan delegate to the Third International Congress on TROPICAL AGRICULTURE, which will meet in London at an early date.—A recent issue of the Official Gazette contains the regulations promulgated by the Chief Executive in connection with the CONSERVATORY OF MUSIC, which will be opened the coming autumn. This institution will give primary and advanced instruction in vocal and instrumental music and in theatrical arts, and its classes will be open free to all persons qualified to take advantage of the instruction.—On the new road between Aricagua and Carenero, State of Miranda, workmen discovered VEINS OF COPPER which, on preliminary examination, seem to warrant the belief that large quantities may be available for commercial exploitation. Senores Ambrosio Bolívar and Demetrio

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